




ExpoTees 2023

Showcasing the next generation of digital expertise

School of Computing, Engineering & Digital Technologies

tees.ac.uk/expotees

Teesside University

to ExpoTees 2023

I am delighted that ExpoTees 2023 is our 18th annual exhibition of our students' work, showcasing some truly excellent projects from areas including computer science, data science, cyber security, programming, computer games art and design, visual effects, computer animation and digital arts.

It's a great credit to our students, and the staff who have taught and supported them during their studies, that our graduates enter employment with the skills world-leading organisations demand.

Professor Chrisina Jayne

Dean
School of Computing, Engineering & Digital Technologies

Friends of ExpoTees

ExpoTees has always been made possible and enhanced by the support of our generous sponsors and incredibly supportive visitors.

Each year, there are new local start-ups, new friends, partners and student cohorts to meet.

If you are interested in being part of this fantastic event to support your recruitment in the future, we would love to hear from you. Contact us:

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What is ExpoTees 2023?

On display is the finest work from our final-year students, covering animation, concept art, computer science, games design, programming and visual effects.

Our students explore a chosen subject area and demonstrate their ability to creatively apply their learning. The project is often in an area in which they have developed an interest throughout their studies, and some projects even have external clients and require project management to industry standard.

These innovative projects make up an exciting and diverse showcase and we're proud to say our graduates achieve great success in industry.

March Showcase

Computing and Engineering

Students demonstrate work ranging from real-time visualisation of complex systems to innovative web applications and advanced networking solutions to novel applications of artificial intelligence and robotics. Games programming students also exhibited during the March showcase.

May Showcase

Animation, VFX and Games

Animation, visual effects, games, concept art, creative and technically challenging projects in the areas of 2D, 3D games, games programming, animation and visual effects, concept art, real and fantastical character modelling and texturing, innovative game designs, complex and highly detailed game environments.

Teesside University London joins London Higher

Teesside University London was announced as the first new member to join London Higher this year.

London Higher is the membership organisation for universities and higher education colleges across the capital. Teesside University London has joined the London Higher Centres Group, comprising ten UK university centres located in the capital.

Teesside University London offers a campus in Queen Elizabeth Olympic Park, with a range of focused courses aiming to give students the skills needed in today's digital world, beginning from September 2023.

With an initial focus on digital technologies and enterprise, Teesside University London capitalises on the University's strengths in animation and games design, directly linking the thriving digital cluster at Middlesbrough with existing partners based in London.

Teesside University London brings in-demand subjects to new markets, equipping the country with the skills for the workforce of tomorrow. It provides a gateway for Teesside University students to access the opportunities of the UK's capital, levelling-up opportunity and supporting their future success.

Professor Craig Gaskell, Pro Vice-Chancellor (Enterprise & Knowledge Exchange) at Teesside University, said, 'Teesside is an ambitious global university and development of our new campus at Queen Elizabeth Olympic Park enables even more students and partners to engage with us, in and around London.

'London Higher's ethos is about supporting students to thrive and to make the most of the opportunities presented within the capital. Working with London Higher helps us establish important additional networks to provide even more opportunities for learners in the region.'

Dr Diana Beech, Chief Executive Officer of London Higher, said, 'We are delighted to welcome Teesside University London to the London Higher community as part of our growing 'Centres' network.

'As our capital city, London is of strategic importance to the entire nation. This includes being an important place of opportunity for universities located outside the capital. Seeing Teesside create an additional campus in London is wonderful both to strengthen choice and diversity in the capital and enhance the interconnectedness of the UK regions.'

Find out more
tees.ac.uk/london


HereEast

Talented animator retains links with Teesside through Animex

An animation graduate who works across games, children's television shows, short films and commercials, is continuing her links with Teesside University by designing the character mascot for this year's Animex Festival.

Animex, which is now in its 24th year, celebrates the best of animation, VFX and computer games, with screenings, workshops and exhibitions. The festival includes an exciting lineup of animation, games and VFX expert speakers, who share unique insights into their industries.

3D animator Bianca Iancu is the animation lead at Caerphilly-based Bomper Studio and specialises in leading teams to create character animations which connect with a wide range of audiences in the short-form space.

Bianca graduated from Teesside University's 3D computer character animation course in 2014. She said, 'I first attended Animex as a student in 2013, then in my final year as a volunteer.

'After I graduated, I came back to Animex a couple of times, once when I was working in the games industry and then last year, I was asked back to speak at the festival.

'I gave a talk on 3D animation workflow on two kids' television series that I had recently helped to animate: *Go Jetters* for the BBC and *Pip & Posy* for Magic Light Pictures. It was a brilliant experience. I met a lot of great people, as well as some personal heroes, and I love being able to give back to students, whose shoes I was in not that long ago.'

Through her links with Animex, Bianca was invited to design the character mascot for this year's festival, which takes place from 6-10 November.

Bianca said, 'I was delighted to be asked to design the mascot, and also a bit nervous. I felt a sense of responsibility, because Animex is something that I was so close to over the years.

'The inspiration behind the idea was passion and creativity, which were key words within the brief. They resonated with me, reminding me of Elizabeth Gilbert's famous TED talk about the 'elusive creative genius'. I took that idea and ran with it, while also incorporating a more illustrative style that I felt would work better for Animex.

'I eventually went with a Betta fish. It captured the essence of what I was aiming for. As well as being an elusive ethereal sea creature, I also wanted it to be cheeky, in that 'I know something you don't' sort of way.'

She added, 'I knew from the start that I wanted to match the style of the branding that already existed. The Animex branding has a teal and orange colour palette, so I wanted to incorporate those lovely, complementary colours into the final design, while still making sure the character stands out.'

Bianca is passionate about adapting visual storytelling across different mediums, and is inspired by how art and technology play a part in shaping our view of the world.

New scholarship helping break down barriers to the animation and games industries

Teesside University's internationally renowned Animex festival is supporting a new scholarship helping students from under-represented groups achieve a career in the animation or games industries.

The Animex Scholarship is available to students from under-represented groups who are seeking to study one of a range of degrees in the University's School of Computing, Engineering & Digital Technologies.

It is funded by the Tees Valley Mayor and Combined Authority, both key partners of the annual Animex festival, helping to drive its success in recent years.

The Animex Scholarship provides £2,500 to one eligible student who successfully enrols to study animation, stop motion, concept art, visual effects, games art, games design, games development or games programming during the 2023-24 academic year.

The successful Animex scholar receives free access during their degree to the University's internationally renowned Animex festival, which celebrates the best in animation, VFX and computer games.

Animex, which is now in its 24th year, holds annual screenings, workshops and exhibitions, along with a lineup of talks by animation, games and VFX industry experts who share insights and behind the scenes stories from some of the world's biggest animated titles, television and film blockbusters, and bestselling games.

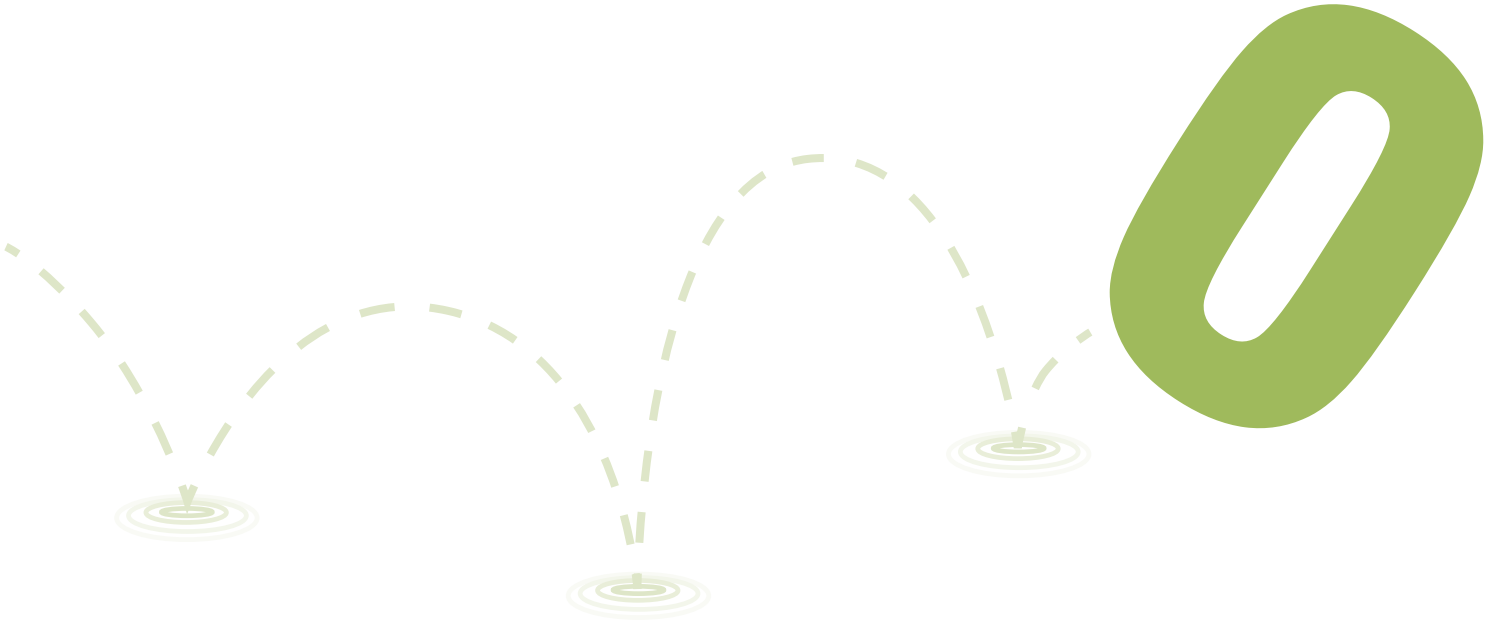
Last year, the festival introduced a Diversity and Inclusivity Showcase programme of talks and discussions, organised in partnership with UKIE #RaiseTheGame, to showcase projects that highlight diversity and inclusivity within the games industry.

Teesside University is a #RaiseTheGame academic pledge partner, demonstrating the University's commitment to championing and fostering equality, diversity and inclusion, while working collectively to drive meaningful cultural and behavioural change to create a more diverse and inclusive games industry.

Siobhan Fenton, Associate Dean (Enterprise and Business Engagement), School of Computing, Engineering & Digital Technologies, said, 'We are excited to be working with the Tees Valley Mayor and Combined Authority to offer this scholarship, which will help to break down barriers to encourage students from under-represented and disadvantaged groups into the games and animation industries.

'It could make a real difference to a talented student with a passion for games or animation.'

Tees Valley Mayor Ben Houchen said, 'With the fantastic Animex festival, each year Teesside University inspires and entertains while showing off the best local talent in our ever-growing digital sector.



Animation & Visual Effects

The following examples of work help to showcase why we are recognised so highly in regards to our animation and visual effects courses. The projects below are chosen by, and fully realised by, the students themselves, giving them the freedom to focus on a wide range of skills and helping them to specialise in whichever area they feel most suited to, and wish to focus their career ambitions around. This freedom and independence prepares them to make the jump into their chosen field and industry as effortlessly as possible.

Students from these courses have gone on to work and thrive in such companies as Framestore, Double Negative, Moving Picture Company, Cinesite, Pixar, DreamWorks and Industrial Light & Magic. Others have been successful in their fields while also setting up their own companies and studios both in the North East and throughout the UK. We happily welcome them back to ExpoTees as industry guests and look forward to this current cohort being yet another future generation of industry returning guests in the near future.

We are ranked 18th in the world in the *Animation Career Review International* Animation School Rankings 2022. (Top 25 International Animation Colleges – formal degree. 191 colleges considered. Find out more, tees.ac.uk/source). Our students enjoy using dedicated facilities that are provided for animation and visual effects, with access to a traditional animation studio that combines cutting-edge technology with wet room facilities, as well as access to our world class AVFX studio. We also have a motion capture studio right next door, where our students can find some of the best motion capture equipment available in the UK.

Our Animation and Visual Effects courses for 2023 - 24:

Undergraduate

- BA (Hons) 2D Animation and Stop Motion
- BA (Hons) Animation
- BA (Hons) Visual Effects and Motion Graphics

Postgraduate

- MA 2D Animation and Stop Motion
- MA Animation
- MA Applied Immersive Technology (Creative Industries)
- MA Applied Immersive Technology (Creative Industries) (with Advanced Practice)
- MA Visual Effects

BA (Hons) 2D Animation and Stop Motion

Eliza Calcraft
Spin Me a Yarn

My project is a tale of two sheep discussing the history of knitting in British culture. I've been delving into my Yorkshire heritage, focusing on Bradford and its history as a woollen capital. I've translated this research and passion into a fireside tale showcasing the folklore surrounding the craft as well as some real historical info. This is a craft that is close to my heart, and one which I have taught for a few years to keep it alive.
This project has helped me improve my puppetry skills, as I've never had to create non-human puppets before. It's been a refreshing and exciting challenge to oversee the entire pipeline of a project. This was also my first experience making my own sets and animating the whole piece, so I've had to expand my skills to match this new challenge. Inspired by the work of Laika Studios and Aardman, I watched their animations growing up and would like to bring that same wonder and inspired storytelling into my work.

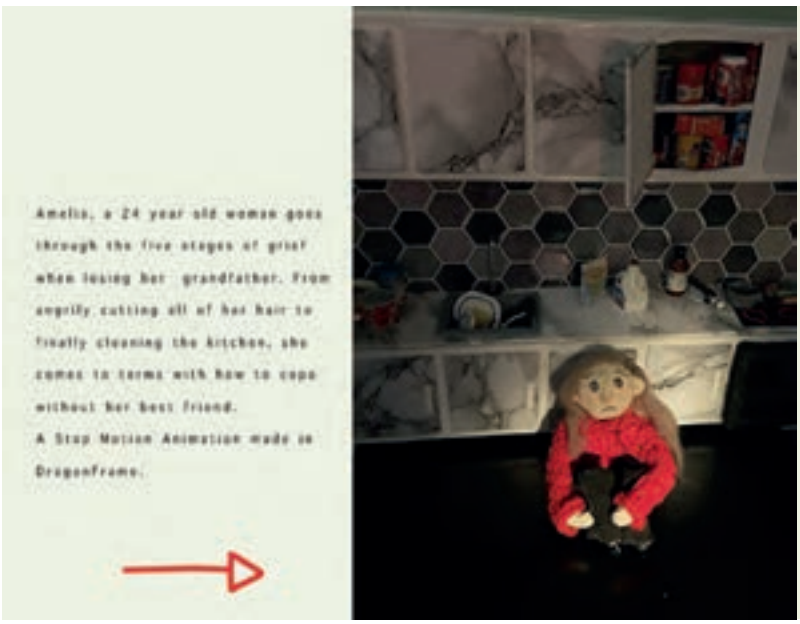
Becky Glitherow
Caged

My final-year project is called Caged. It's a 2D animation about a rabbit who seeks freedom from being left in a cage. I have developed my skills in 2D animation for this project.

Jasmin Hosseini
Sterling the Moon Boy

A 2D digital animation created in Toon Boom Harmony, starring Sterling, a young lonely moon boy who lives inside the moon. He spends every day working for the man in the moon, who he has never seen, yet still idolises. Giving into his loneliness, Sterling opens the forbidden door that reveals he was alone on the moon all along and not even the man in the moon was there as he thought he had been. As the realisation sinks in, he falls into despair and becomes a shooting star.

I am aspiring to specialise in 2D digital character animation, and this story demonstrates many aspects of bringing writing and abstract concepts to life, having the characters interact with these elements and fictional spaces. This results in memorable motion imagery drawn by hand, and held together by the animation of emotions the characters express for the audience to develop attachments toward.



Sarah Pettler

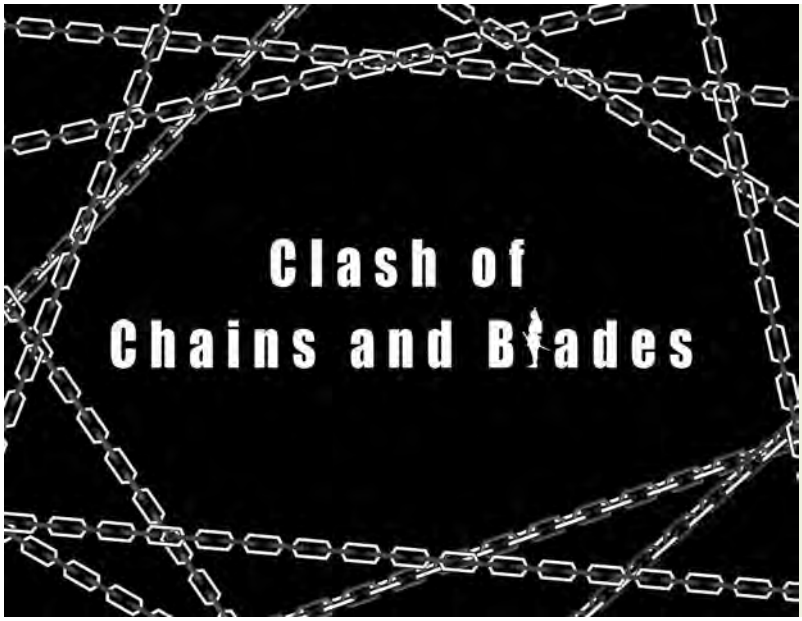
Without You

I chose to exhibit my stop-motion short film Without You that is based on grief and loss, that I created in my final year. This piece was chosen because I believe that it showcases my best work and skillset.

The skills I have developed through creating this were time management, working with different materials, communication and my storytelling abilities.

My biggest inspirations come from Aardman and Laika Studios as I adore the films both companies produce.

BA (Hons) Computer Animation



Taylor Gallagher

Clash of Blades and Chains

Clash of Blades and Chains is an animated fight scene featuring a skilled samurai and a cunning chain wielder. The samurai expertly dodges, deflects and slashes oncoming barrages of chain projectiles, attempting to close the distance between the two. The chain wielder tries his best to keep the distance between them, sending more projectiles. Several dynamic camera angles are employed to enhance the flow of the fight, resulting in many tense and gripping scenes.

This animation is entirely hand-keyed, except for the chains, which utilise a mix of dynamics and motion curves to create the necessary movement and response for a compelling fight.

Yang Ge

Mocap Animation Showreel

This is my graduation project, which revolves around the theme of recalling the beauty of reality during the process of a person being killed, through flashbacks of combat with comrades and training scenes. I was deeply inspired by games like *Assassin's Creed Odyssey* and martial arts such as karate. Through long hours of motion-capture learning, I realised that a good actor is crucial for motion capture. I collaborated with two actors who are experts in karate, boxing and sword use. Throughout my project, I continuously improved my motion-capture skills, such as better data cleaning, retargeting and enhanced proficiency in using MotionBuilder.

Alex Georgiou

No pity! No remorse! No fear!

Based on the Warhammer 40,000 universe. I created a diorama which displays a large range of skills including sculpting with ZBrush, hard-surfaced modelling, UV mapping and rigging with Maya, texturing with Substance 3D Painter, and finally a scene in Unreal Engine which makes use of the Niagara system for particle effects. The main focus of the work is a space marine of the black templars in an action pose.

Zoey Hoe

Mythical Creatures

I recently tasked myself with a challenging rigging project that required me to create three separate creature rigs, each with its own unique features. The project demanded a lot of creativity and technical skill, but I was up for the challenge.

The first rig I created was a follow-through animation rig. This allowed for more realistic movement of the creature's body parts, such as its tail and ears.

Next, I worked on a squash and stretch rig. This rig allowed for more exaggerated movement of the creature's body, making it ideal for more playful animations.

Finally, I tackled the most challenging rig of all – the transforming rig. This rig allowed the creature to fold and unfold its wings. It required a lot of technical expertise and experimentation, but I was pleased with the result. I'm proud of the work I accomplished and love seeing the rigs in action.

Ted Lonsdale

Arctic Monkeys FYP Music Video

My project is an animated music video concept that has been inspired by the Arctic Monkeys' album's promotional art, music videos and set designs of *Tranquility Base Hotel & Casino*, using the track Batphone. The video includes an imaginary Luna hotel and casino, switching between the different rooms and using the in-engine cameras to pan around the various environments, with a focus on dynamic lighting and mood setting that resonates with the original vibe of the music. The video includes hand-keyed Metahumans playing piano and guitar, as well as self-captured motion-capture performance.

Ewan Millin

Hunger for a briefcase

I chose to exhibit my final-year project. It is a short animation about a chase which contains some slapstick comedy. It includes animation of multiple characters and some jokes as the characters get hit in a comedic way.

Daniel Romaniuk

Boss Cinematic

I've created a boss intro cinematic using Blender, inspired by *Dark Souls* and *Monster Hunter*, that could be used in a real game and smoothly transition to gameplay. I aimed to display both characters' personalities and combat capabilities through the animation and cinematography and to create a sense of suspense and excitement, and to set the right tone for the boss fight after it.

Outside of the animation itself I also modelled, textured and rigged the main character and boss character. While I am primarily an animator, I dabbled in modelling and texturing and enjoyed it so I wanted to do it for this project, using Blender to model and rig the characters and Substance Painter for texturing.

Kirdihan Sivaranjan

Dojo Dispute

I have created a 3D animated battle within Maya between one main character and multiple enemies within a dojo. As I am more invested in animating cutscenes, I heavily focused on the cinematography to create a rapid but effective sequence of shots. Also, I have used the Open Timeline workflow where I have animated each shot in their own file, rendered them and immediately put them into a video editor. This allowed me the freedom to work on whichever shot I wanted to and make changes to the sequence shots easily.

Andy Zieba

Skull Chaser: Day One

Skull Chaser: Day One is my final project at Teesside University. I created a snippet of a functional video game that not only showcases my animation abilities but also the capabilities to use them in the context of a video game. It helped me better understand the process that an animator must go through on a video game project, and throughout the experience I've gained a lot of insight into how things are created and how I need to approach specific types of animations. Thanks to Blueprints, I was able to create all the functionality within the project and I feel I have now a much better idea of how to use them in a variety of scenarios.

BA (Hons) Computer Character Animation

Zen Ng

Pondering –
3D Animated Short Film

I created an animated short film by utilising unconventional filmmaking techniques. I used the colour black as a concurrent visual motif throughout. The gist of the story in my short film is that one day a salaryman was laid off his job, and when he came home from work, he caught his girlfriend cheating on him. Due to this series of unfortunate events, he goes to his favourite diner to contemplate suicide while he waits on an alcoholic drink. The whole story happens in a day and takes place in two main locations, a diner and a rooftop. I went for a more realistic style of animation, and my short film showcases my skill in animating moments of subtle character-acting, body mechanics, lip sync animation, cinematography and editing.

Eunice Ong

Character Animation –
Demo Reel

This demo reel is a demonstration of my work and versatility as an animator. It consists of a wide display of body mechanics, acting, timing and creature animations. Through this demo reel, I intended to focus on polishing my fundamentals of animation.

Aside from my animation demo reel, I will also share the reels of all the previous short films I have worked on and my contribution to them as more than just an animator.

Halsey Watt

Demo Reel

A short portfolio highlighting a range of different exercises demonstrating my understanding of 3D character animation. The following video goes over a range of skills I have learned throughout my course. This includes a few animation cycles, a character acting scene and a demonstration of my creature-animation skills.

BA (Hons) Visual Effects

Kristoffer Jeynes

The Sniper's Nest, An Enclosed Environment

I love military and apocalyptic themes like *The Last of Us* and *Escape from Tarkov*, which have always been a guilty pleasure for me while I was growing up. My work takes place in an abandoned apartment room that has been converted into a sniper's nest in a war-torn environment. Inside the room are various bits of military equipment from the sniper rifle itself to different living utilities such as a kettle and sleeping area. Windows are boarded up and sandbags fill holes that have been created from gunfire and debris. The interior is inspired by the game *Escape from Tarkov* and has that old Soviet feel to it with harsh contrast of light from the exterior shining into the poorly lit sniper's position. The modeling was done in Maya and extra details were added in ZBrush, with texturing done in Substance Painter.

Lorenzo Alliata Nobili

Digital Fashion Show

I created a digital fashion show inspired by Sans Dieu. I took real-life pattern of the clothes and modelled them using Marvellous Designer. The overall shape I gave to this project is a mix of realistic and cyberpunk style. At the end of the project is a render of a catwalk with multiple outfits walking through, focusing on the animation of the cloth.

Jordan Waistell

Digital Character Sculpting

My chosen area of work is character sculpting within ZBrush, Maya and Substance Painter. The main skills I have developed creating my sculpts have come down to technical aspects such as retopology. I also enjoyed learning the texturing process in Substance Painter – even though this process was probably the most technical to achieve with having to create UV maps for it, the payoff is very worth it as the result is professional.

Leonie Albert Wong

A Blade Runner Inspired Matte Painting & Compositing Project

In my exhibit, I have chosen to showcase my work in 3D pass compositing and matte painting. The exhibit shows my ability to combine live-action footage with 3D elements and special effects to create believable and immersive environments.

I am showcasing the technical and creative skills I have developed in 3D pass compositing and matte painting, including the ability to create and integrate 3D elements, work with lighting and colour, and use compositing techniques such as projection effects and relighting in Nuke.

Jeremy Khoo Xuhe

Houdini VFX and Procedural Experimentation

My work is the result of diving deeper and into VFX and proceduralism, primarily in SideFX Houdini. On top of displaying a solid level of technical understanding, achieving VFX animation with pleasing aesthetics. While SideFX Houdini was the primary package used, other packages used include Substance Painter and Nuke.

MComp (Hons) Visual Effects

Finn Frankland

Final-Year Projects

The first project I want to talk about is Cold War, which was a massive undertaking for me, because not only was it my second time directing but also the most ambitious project I've ever done. My team of seven amazing artists worked tirelessly and I'm really proud of it. The project depicts a large-scale war between spaceships within a snow planet. With this premise alone I learned so much about direction, cinematography and editing. Not only did I create the previs but also did all the animation, minus the characters, and composited every shot.

My second project is called Face-Off which is inspired by the new *Westworld* series, specifically when one of the android's faces splits open revealing the machinery. The premise alone creates a compositing challenge, but thankfully new face-tracking tools like KeenTools have helped. My favourite part of this project was modelling the animatronic head, as my goal was to make it as scary as possible.

MA 2D Animation and Stop Motion

Isaac Busari

2D Animation Showreel for 2022

This is a compilation of some of my work between 2021 and 2022, created using software ranging from ToonBoom, Animate CC, After Effects, Photoshop, Adobe Audition and Adobe Premiere Pro. I was back home in Nigeria when all of them were created before starting my master's degree at Teesside University. They are mostly clips from music videos and commercials.

Emily Cowling

Row Boats

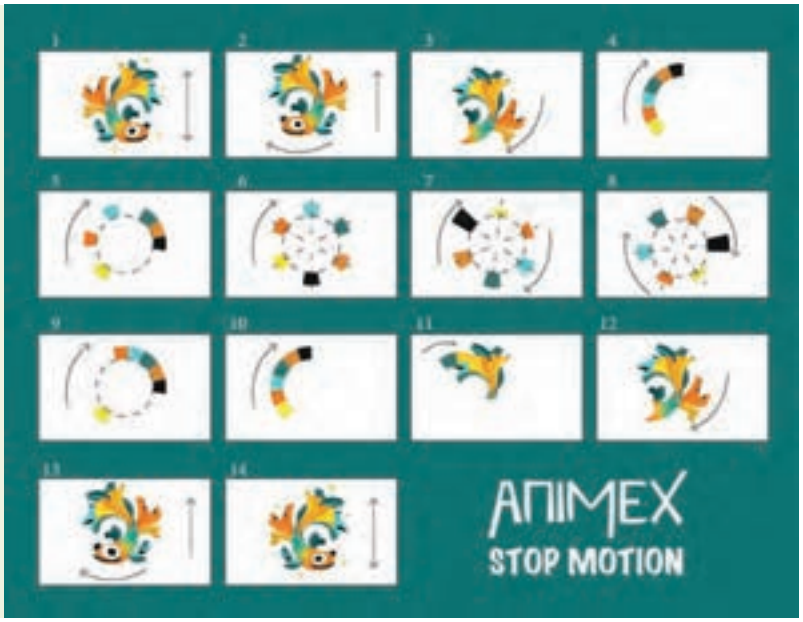
This is a mixture of stop motion and 2D animation, depicting how my grandad got shot in the hand on national service in Malaysia in the Malayan Emergency in the 50s. This is told from my dad's point of view, remembering how he was told the story as a child.

My 2D work is done by hand, using inks and collage, before being scanned and then animated in ToonBoom using parallaxing, to create a pop-up book effect. My stop-motion work is photographed in Dragonframe and uses a mixture of exposed metals and raw materials, with bright childlike shapes and colours to create a contrast to the childhood memory and the serious and traumatic subject matter.

Ali Dehestani

Animex Logo Motion

I was commissioned to produce the Animex 2023 logo motion and chose to make it through stop motion. I decided to create a loop animation. It will be a fish that swims and morphs into different colourful rectangles. These rectangles will rotate like a loading sign. Finally, they gather together and morph into a fish again. I believe that plasticine is the best material for this kind of morphing animation.

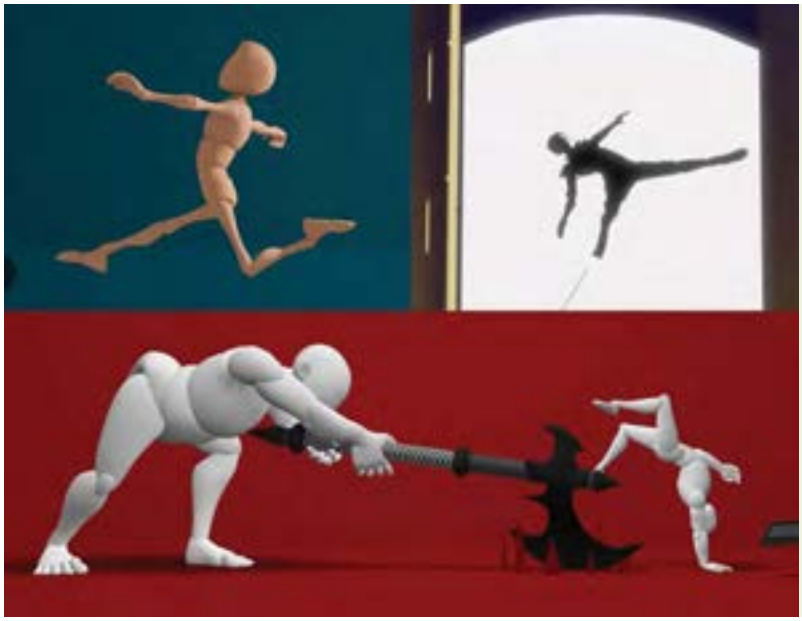


EXPO TEES

Xiaowen Deng
Ephemeral Winter

The film tells the story of a woman and a man who meet and fall in love and get married, and then the man dies in battle. I based the film on traditional Chinese culture, hoping that in spreading it I could also provoke some thoughts about war.

MA Animation



Dhiksha
Character animation reel

My animation demo reel is a compilation of some of my best 3D animation work from the last year. Included are animations from assignments as well as personal projects. I have been focusing on honing my character animation skills, particularly in body mechanics, combat and game animation.

I always start with a strong blocking pass, or a hand-drawn storyboard for complicated shots. Once I have my key storytelling poses, I move on to perfecting the weight and timing to convey the impact of my character's actions, making sure there are clean and appealing arcs. I create animations using Maya and am familiar with implementing them into game engines.

Jiqing Fan
Animations

I have created a demo reel of animations showing my skills that I have developed while at Teesside University. The showreel showcases the intentions and personalities of the characters. This includes a *Evangelion* sword animation, interacting with a heavy object, a walk to a stop and a walk cycle. These animation shots present my understanding of animation principles and techniques through body mechanics and acting movement. I mainly used Maya, After Effects, Premiere Pro and Photoshop.

Katherine Lindhorst
Character Animation Demo Reel

I'm showcasing my work in body mechanics, acting, and creature and facial animation. I have a particular interest in cinematic and facial animation and have developed skills in producing both realistic and stylised work. I wanted to show my understanding of the intricacies of character performance in both my acting and facial animation work. In my body mechanics and creature animation I wanted to demonstrate my abilities in animating complex characters and sequences, especially involving two characters fighting. All the animation was created in Maya, and as I have an interest in games, you can see some work running in real time in Unreal Engine 5.

Gopika Rakesh
Animation Showreel

My work focuses on both course work and personal projects. I am interested in character animation with particular emphasis on gameplay animation. My showreel includes body mechanics as well as acting shots. In addition, it shows a playable character in Unreal Engine whose animation I have done in Maya. While doing these animations, I have learnt and broadened my understanding of animation principles as well as improved on my knowledge of Maya and how systems like constraints work. I hope to work in the game industry and hence decided to shift to gameplay animation for my master's project.

MA Visual Effects

Arjun Vadakkepatt Ajay
3D Environment Creation

I've made the decision to focus on environment and asset creation. I created an environment complete with textured and modelled elements as well as finished lighting. Throughout the journey, I improved my modelling and lighting skills, learned new workflows and experimented with new software. The World Machine and Unreal Engine workflow was an interesting one that I discovered during this process. I am now working on creating an environment scene in Blender for my master's project.

Jhin Chuang

CG Animation, Visual Effects and Models Demo

I carried out some modelling, shading, rigging and simulations of some CG shots to express what I imagined before making a full CG film.

I plan to make a short story about time travel in the future.

Rishi Dahiwad

Houdini FX Artist

My aspiration beyond getting my master's is to continue working as an FX artist. My demo reel consists of my personal projects and some of my recent industry work to showcase the key principles required as an FX artist including rigid body simulations, water FX, particle FX and pyro simulations.

Rahul Raj Devaraj

3D Modelling

I am especially interested in 3D modelling since the designs of movie sets and props have a curious effect on my mind and have influenced my decision to work in the media industry. An Indian-style fortress is what I modelled at a large scale for my group project. I'm planning to design the interior and exterior of a church with a mix of Norman and Gothic architecture for my master's project. I developed the right modelling technique in the castle, which will let me create many design styles in the future.

Ben Johnstone

A VFX Journey

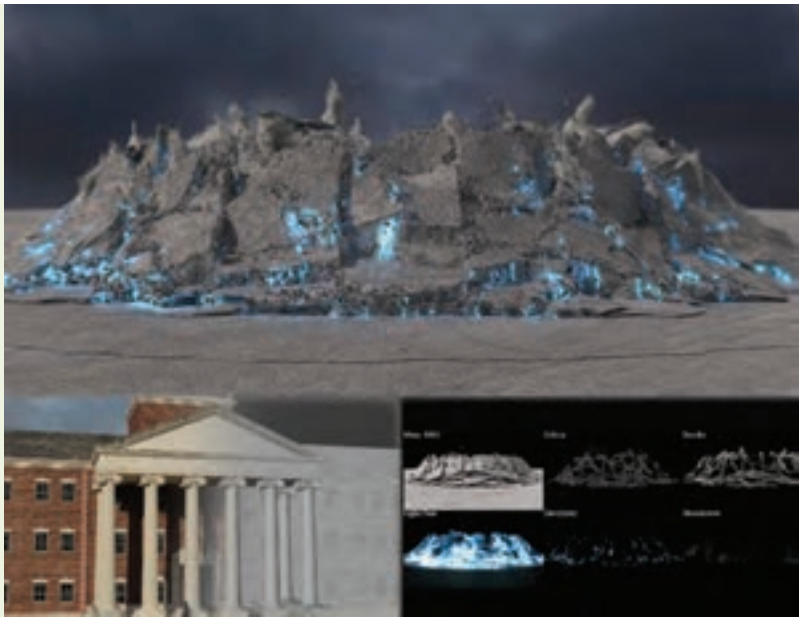
This is my VFX journey, an exhibition showcasing my work and knowledge gained over the past two years at university. I was fortunate to have the chance to explore and improve my skills in various areas of visual effects, including compositing, 3D modelling, and research and development in virtual production using Unreal Engine and simulation with Houdini.

My main projects include a car crash simulation made in Houdini, which has been match moved and integrated into live action footage, and a landscape for the purpose of creating a cinematic establishing shot for film or TV.

Mitesh Kamat Kamat

VFX and 3D Modelling Portfolio

The creation of a VFX sequence for a superhero landing on the ground using various simulation techniques, such as ridged body dynamics, smoke and particles simulations, is the focus of my main project. It exemplifies the technical and creative abilities needed to produce high-quality visual effects for film and television, and emphasises the value of combining various simulation techniques to produce a convincing and dynamic result. In addition to my main project, I'm showcasing multiple VFX sequences created in Houdini and Maya-created 3D models to bolster my portfolio.



Akshita Dnyaneshwar Khandekar

Visual Effects and 3D Animation Showreel

I wanted to make a full 3D world with lots of unique objects and hero assets, and a scenario that has a strong narrative that enhances the images. I was able to advance my modelling and shading abilities, gain a better understanding of how to make textures and PBR materials, and gain the self-assurance necessary to see a project through to its successful completion. Using Maya and Blender I was able to try different techniques including creating complex shapes, dynamic particle systems, and procedural landscapes and environments.

Gareth Owen

Have a dream, Follow the dream, Live the dream as a visual effects compositing artist

My work consists of examples of compositing effects.

I know and use several visual effects' compositing programs. Seeing which one is the best for my workflow and gives me the best results is always the key.

I would like to showcase examples of my work within my studies from Teesside University as a master's student and showcase the power and importance of compositing in visual effects.

Aayush Raisoni

3D Artist and FX Artist

Creative-minded artist with a diverse skillset dedicated to producing quality work in a timely manner. Extremely motivated, hardworking, and I am able to contribute skills to benefit the project. Also work well in a team and I am able to communicate ideas as well as the ability to lead a group to get a project done. I have a good knowledge of softwares like Autodesk Maya, Blender, Unreal Engine 5, Substance Painter, Houdini, Marvelous Designer, ZBrush and some compositing software like Nuke and After Effects.

Tamilalagan Santhakumar

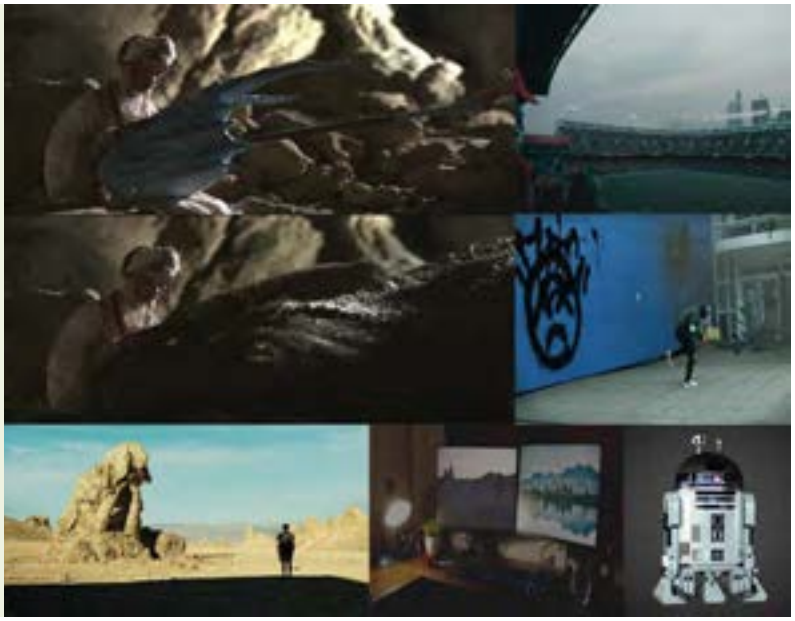
3D Character Design

I intend to submit some of my art works, which include character modelling with high-detailed sculpting done in ZBrush and Blender.

Mohamed Ishaq Muhammad Yahya

The Compositor and his Compositing

My projects are based on live-action compositing and are displayed in this exhibition to highlight my progress in compositing in various ways. I want to spend as much time as possible taking my own shots and images for compositing. These are some of the shots I created for my project, which combine effects animation with live-action footage while also using other various methods to complete my compositing.



Computing

These diverse research and development projects encompass a range of topics from the highly abstract and theoretical branches of computer science to the practical applications of the theory in systems design, software development, ICT and data science. Our courses are constantly updated to ensure that we are ahead of the game in providing students with the skills to develop systems and solutions using the very latest technologies. This can be seen from the selection of projects on show, which share a common theme – innovation and experimentation. Many of our BSc programmes are reviewed and accredited by the British Computer Society.

Students are supported by outstanding facilities, including a wide range of web, networking and programming studios, and dedicated labs running industry-standard software. The School maintains close links with industry, and academics are actively involved in consultancy. The high quality of computing and web courses at Teesside University has been recognised by a national review undertaken by the Higher Education Funding Council for England. Many of our BSc courses are reviewed and accredited by the British Computer Society.

Our Computing courses for 2023 - 24:

Undergraduate

- BSc (Hons) Artificial Intelligence
- BSc (Hons) Business Technology
- BSc (Hons) Computer and Digital Forensics
- BSc (Hons) Computer Science
- BSc (Hons) Cyber Security
- BSc (Hons) Information Technology
- BSc (Hons) Software Engineering

Postgraduate

- MSc Applied Artificial Intelligence
- MSc Applied Data Science
- MSc Artificial Intelligence
- MSc Artificial Intelligence with Data Analytics
- MSc Computer Science
- MSc Computing
- MSc Cyber Security
- MSc Digital Forensics and Cyber Investigation
- MSc Financial Technology (FinTech)
- MSc Immersive Technology
- Msc IT Project Management

BSc (Hons) Computer Science

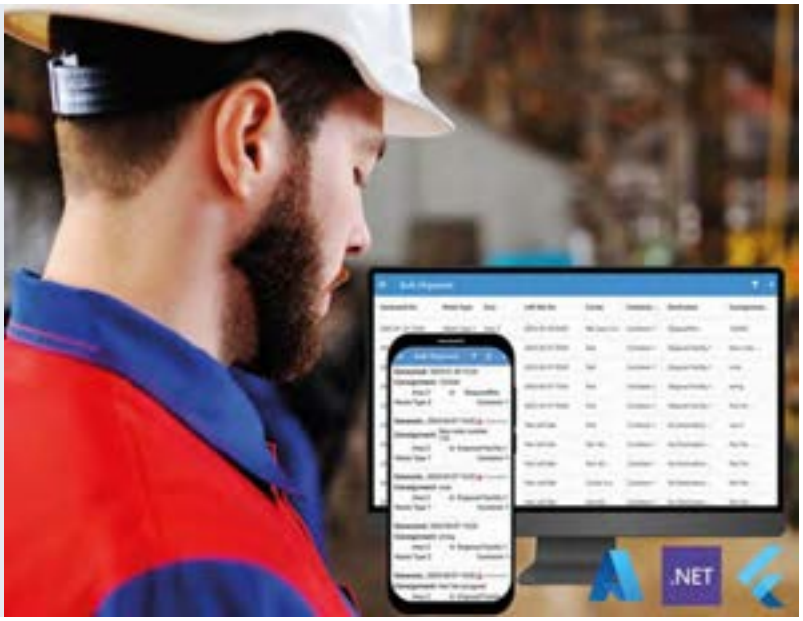
Arran Martin Bollands
HartMOC

I'm showcasing my final-year project, which is a change management system for the manufacturing industry following ISO standards, allowing this application to be used anywhere in the world. This application utilises the Blazor framework to maximise the functionality and maintainability of the solution. The plan is also to host it on Azure to further add scalability and resilience to the prototype.

Leo Bracken
HartWaste

HartWaste is a multi-platform prototype application designed to manage the shipment and disposal of waste items on a manufacturing site, while helping to ensure sites adhere to all the elaborate rules and regulations regarding waste disposal. Easily accessible when in the field through a mobile app that allows the user to quickly scan a waste item using a QR code to select the relevant detail. Or in an office environment using an application or browser.

As part of my year in industry, I had the pleasure to investigate potential problems which could be solved through a web app. Replacing an outdated system, this project also acts as a personal entry point into the world of flutter development.



Billy Renwick
Greener Grass

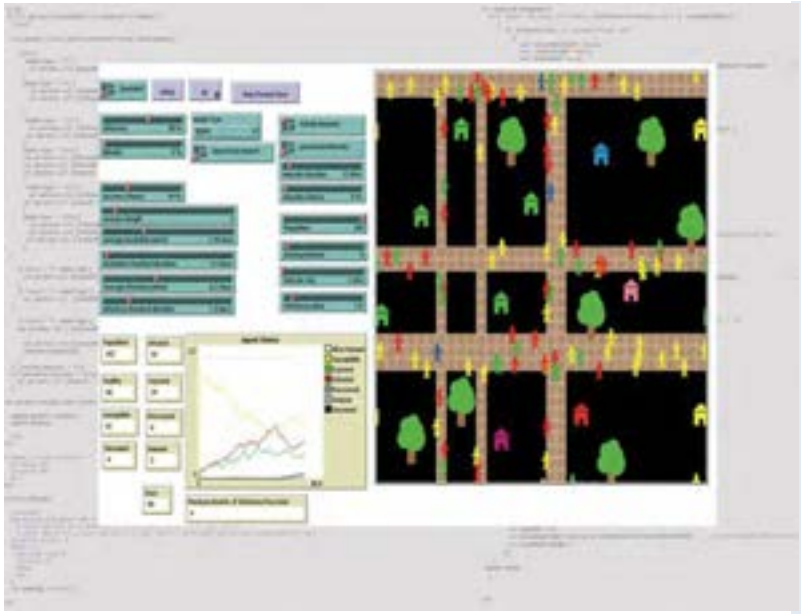
I'm showing off my platform concept of Greener Grass, which aims to bring people who need garden-related jobs doing with the people who can do them. The concept makes use of a Java Android app using a hosted backend. The backend allows for other techniques to be plugged in and make use of the backend, making the platform scalable.

APPLYING MACHINE-LEARNING & NEURAL-NETWORKS TO MODERN PROBLEMS

Matthew Alexzander Rutland

Application of Neural Networks in Identifying Military Assets

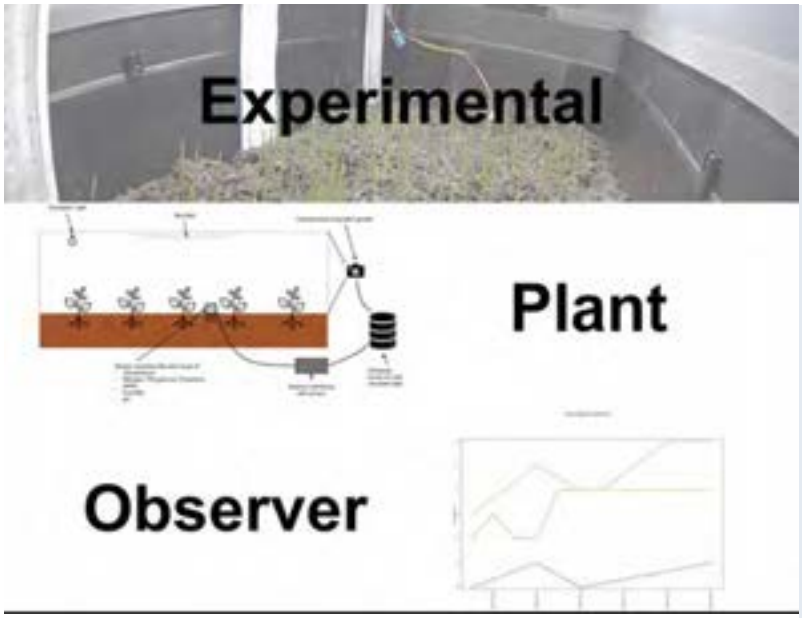
I show code and relevant datasets that demonstrate my ability to create and apply neural networks and machine learning to practical applications.



Jordan Seymour

Exploring the solutions of agent-based models when applied to SEIRD compartmental modelling, using artificial intelligence and data visualisation techniques

Agent-based epidemiological modelling suite created in NetLogo: it simulates the interactions of people and disease, its life cycle, and parameters to change the simulation environment or disease parameters. The skills gained during this unusual venture were niche in the areas of agent-based models, simulations and epidemiology.



Paul Jonathan Shail

An Investigation into Data Management of Internet of Things (IoT) Control Systems for Agriculture

My project investigates the use of Internet of Things devices to monitor the growing conditions for plants. Data collected from monitoring can be analysed to find optimal growing conditions which can be maintained using automation.

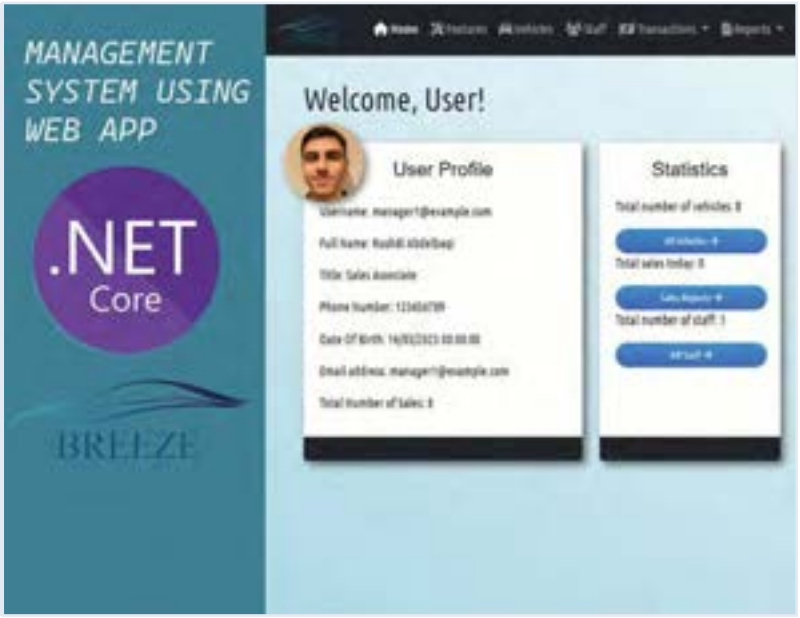
With the dataset collected and live monitoring, the project has the potential of not only awarding farmers with an in-depth insight into the performance of their plants but could also result in healthy growth of plants, free from draught and pest invasion.

BSc (Hons) Computing

Rushdi Abdelbaqi

Dealership Management System Using Web Application

I created a web application showcasing a dealership management system. This includes the process of using methodologies and best practices of software development. I have also chosen to develop this project using DevOps practices, and it includes key features such as deployment, access levels, CRUD operations, and UI and UX design, which formed a large part of my research and work for this project.



BSc (Hons) Information Technology

Lee Patrick Kelly

An Investigation into How Business Intelligence Can Reduce No-Show Appointments within the Health Service

I designed and implemented a patient booking system for a GP surgery, allowing patients to book, view, edit and cancel their healthcare appointments. I also created data visualisations for live app cancellation and no-show appointment data. The project used a variety of different software, including Microsoft Power Apps, SQL Server, MongoDB and Microsoft Power BI. Throughout my project, I have continued to learn and develop both my technical and interpersonal skills. This includes learning how to create a product from start to finish through the software development life cycle while also developing my time management and communication skills.

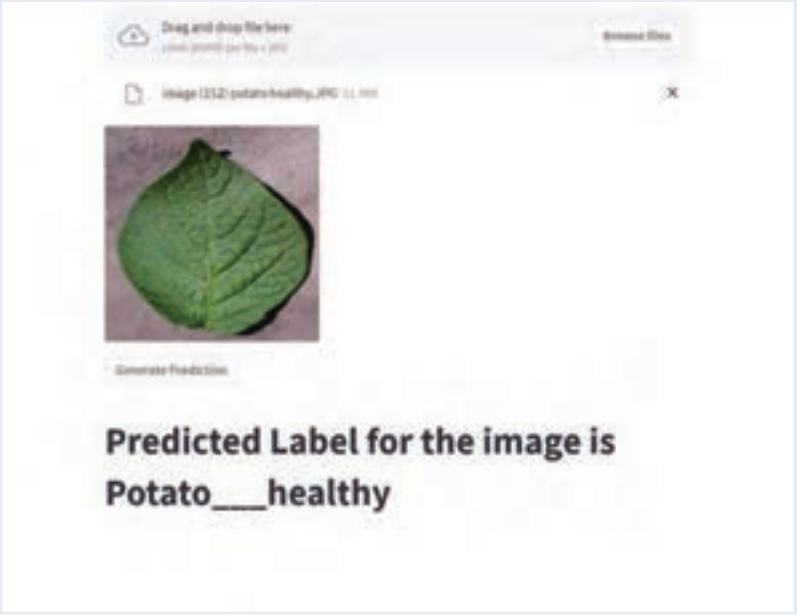
EXPO IEES

Jenny Anne Laybourn

How to Monitor Literacy Rates with Business Intelligence Tools

I have developed an application that can provide user's reading statistics to them based on their reading times. The statistics can be the number of books which they have read that year, broken down into months and their average reading speeds. This relates to literacy rates as it is a way in which data can be collected. I have used both Power Apps and Power BI to complete this project. I have also used SQL Server to store data. The skills developed in producing this application are furthering my knowledge in Power Apps, DAX and SQL.

MSc Applied Artificial Intelligence



Obinna Jude Okafor

Image classification and identification of potato plant leaf diseases using a novel stacked transfer learning model or other transfer learning models

My project involved image classifying and identifying diseases in a potato plant leaf image, using the best performing transfer learning model selected from various transfer learning models, which will include a novel stacked transfer learning model. The model was developed and trained using TensorFlow. Also, the model was deployed to a web app using Streamlit. The end goal is that any potato farmer anywhere can take a picture of his potato plants, upload to the app and the app will show him if his plant is diseased or not. I developed a lot of skills from the project such as learning how to effectively utilise TensorFlow and Keras for deep learning model training, how to mitigate overfitting in deep learning, how to web deploy a model using Streamlit, and how to better utilise GitHub and Git.

MSc Applied Data Science

Meghana Ashok Ganatra

An assessment of machine learning models and algorithms for early prediction and diagnosis of diabetes using health indicators

The primary objective of this research is to apply different machine learning algorithms to predict the diagnosis of diabetes. These models are compared to determine the most effective model by evaluating their accuracy of prediction, alongside other performance metrics such as precision, recall and F1 score. Of the models investigated, Random Forest significantly outperformed the others, achieving an accuracy of 82.26%.


Healthcare Analytics

An assessment of machine learning models and algorithms for early prediction and diagnosis of diabetes using health indicators

Victor Chang, Meghana Ashok Ganatra, Karl Hall, Lewis Golightly, Qianwen Ariel Xu

ARTICLE INFO

ABSTRACT

MSc Data Science

Aniket Sharad Bhosale

Customer Segmentation using K-means cluster for RFM model

The model is formed on behavioural and value-based segmentation and is appropriate as it is concentrated on shoppers' perspectives. The organisations could utilise the segmentation analysis to precisely recommend a certain product to diverse consumers all around the world. These RFM values would be used to filter the valuable customers from the irregular customers with the assistance of a machine-learning model.

Partnership supporting students interested in fast-growing esports industry

We have signed a partnership to work closely with new esports venue The Wired Lobby, to help provide opportunities for gamers and games programmers to thrive in the booming esports industry.

The Wired Lobby is set to open in Middlesbrough's Captain Cook Square shopping centre, offering a full spectrum gaming experience for all levels and styles of gamers. The esports and sim racing venue includes a tournament arena, purpose-built gaming PCs, latest generation consoles and pro-level racing sims, along with a full-size touring car in pole position.

The gaming industry is recognised as being among one of the fastest growing sectors in the IT world and a number of high-profile games studios have been created by Teesside University graduates.

The two-year memorandum of understanding signed by Teesside University and The Wired Lobby outlines how they will work together. Students will be able to showcase and test their work at the venue and get feedback from the public, alongside opportunities for esports' student teams to play and practise in front of a live audience.

The partnership also includes live projects for students, support for recruitment events, guest speakers and industry visits, opportunities for placements, internships and work experience, along with research opportunities, collaboration in extra-curricular activities for students, and sharing insight into industry skills' gaps and needs.

Edwin Ford, managing director of The Wired Lobby, said, 'We have been in discussions with the University since the early days of the project at Captain Cook Square as we were aware that the University is very strong in the field of games programming, with an amazing and progressive student base.

'We are pleased to be officially associated with the University and look forward to seeing the students' work on display in various guises within the venue.'

He added, 'The Wired Lobby offers a unique experience in gaming, giving the students a place to showcase their work, socialise and network with fellow gamers in an environment that understands, lives and breathes the games industry.'

Siobhan Fenton, Associate Dean (Enterprise and Business Engagement), in the University's School of Computing, Engineering & Digital Technologies, said, 'The level of excitement since we first heard about the opening of this dedicated esports venue in the town has been immense. One of our students described the place as a 'gamers paradise' and there is such anticipation and excitement for it to open.

'Our students will have unique opportunities to display their work and to experience the end destination environment whilst completing their coursework.'

Leading games studio helping students gain industry experience

A leading games studio is helping to nurture the future careers of eleven talented Teesside University students.

Games studio Double Eleven has offered 14 placements this year, with eleven of the one-year internships secured by Teesside University students who are completing studies in a range of subjects.

Double Eleven, which has offices in Middlesbrough and Malaysia, has forged close links to Teesside University in recent years, initially through offers of student placements.

This developed into a memorandum of understanding in 2019, with both organisations pledging to work together to encourage and develop collaborative activities.

Double Eleven has been involved in developing games such as *Prison Architect*, *Minecraft Dungeons*, *Lego Harry Potter*, *Goat Simulator Rust: Console Edition* and, most recently, *Fallout 76*.

Courtney Pattison, 22, from Middlesbrough, is among the Teesside University interns. The second-year BA (Hons) Accounting and Finance student said, 'I've had an interest in the games industry for many years and knew a lot about Double Eleven. I applied for the role primarily because I had a passion for improving an organisation's culture, as well as supporting people throughout their career.

'I am going to be working in different departments, such as recruitment, and learning and development, as part of the people and culture placement.

'I hope to have a successful placement year and have a positive impact on those who I work with. I would also like to continue using my knowledge and experience to deliver exciting and informative workshops to enhance the skills of those around me.

'Applying for the internship was daunting, but I would encourage others in a similar position to me who may look at a job application and think they might never be hired as their degree or skillset is different to the job role, to just take the leap and apply. We all have transferable skills, and it could be the best decision you've ever made.'

MSc Computer Games Programming student Toby Cotton, who is completing a coding internship, said, 'I heard about the internship through word of mouth, and it was also recommended to me by Teesside University's Student Futures team.

'That recommendation made me want to apply, coupled with my knowledge of the excellent quality of games Double Eleven has been involved in, such as *Minecraft Dungeons* and *Goat Simulator*.

'I had also spoken to some Double Eleven employees through an open house event held during the University's Animex event.'

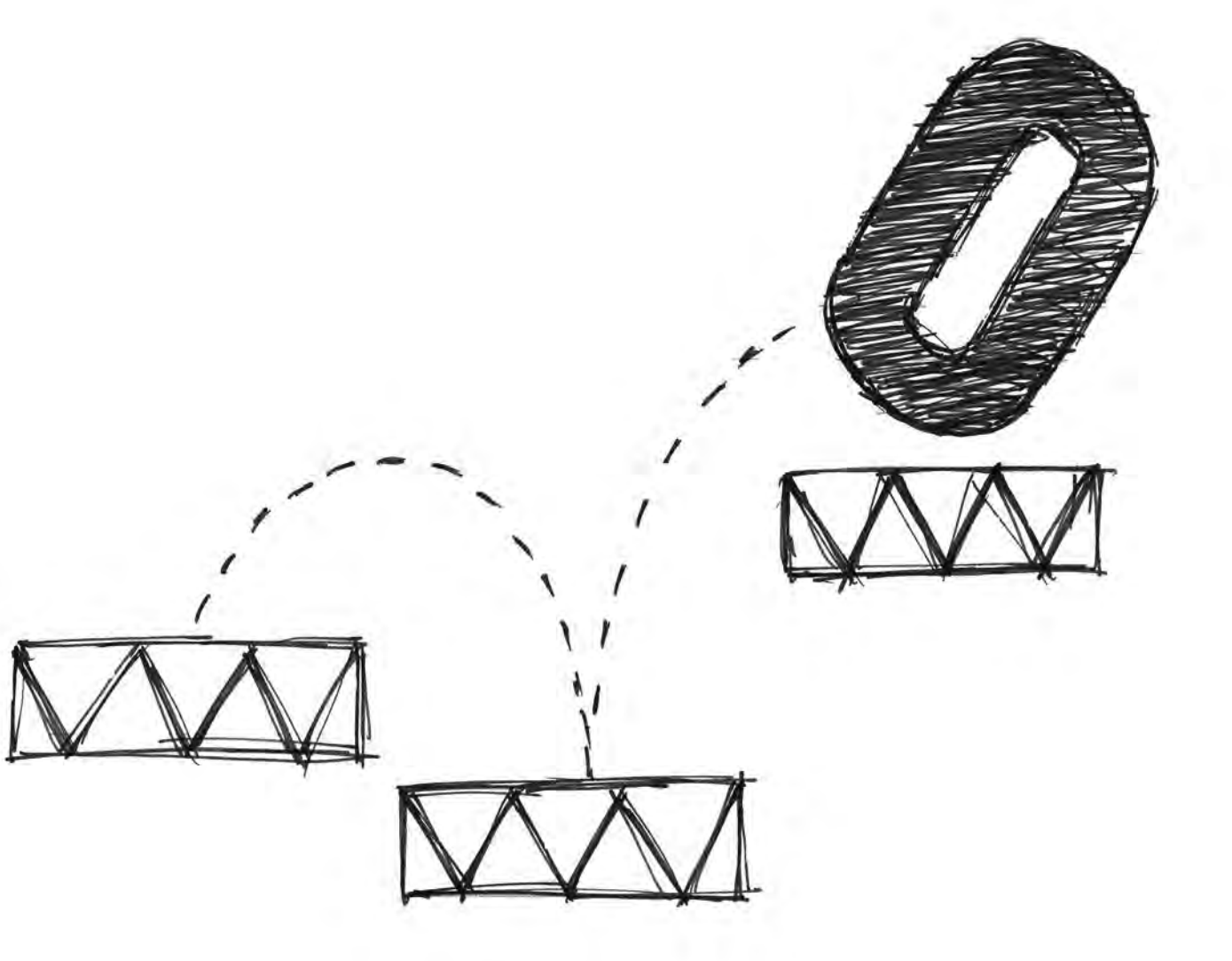
Toby added, 'I hope that after this year of experience I'll be able to finish my degree with a more agile set of skills thanks to my time with Double Eleven, with the hope of using all the knowledge and industry experience to secure employment.'

As well as offering opportunities to help students and graduates flourish while helping to retain talent in the region, Double Eleven also recently announced it was giving all staff a £2,500 pay rise to help with the rising costs of living during a time of economic uncertainty.

Iain Farrell, of Double Eleven, said, 'Our partnership with Teesside University continues to help us to find great interns who become colleagues once they've finished their degree. We're excited to see the intake grow at Double Eleven.'

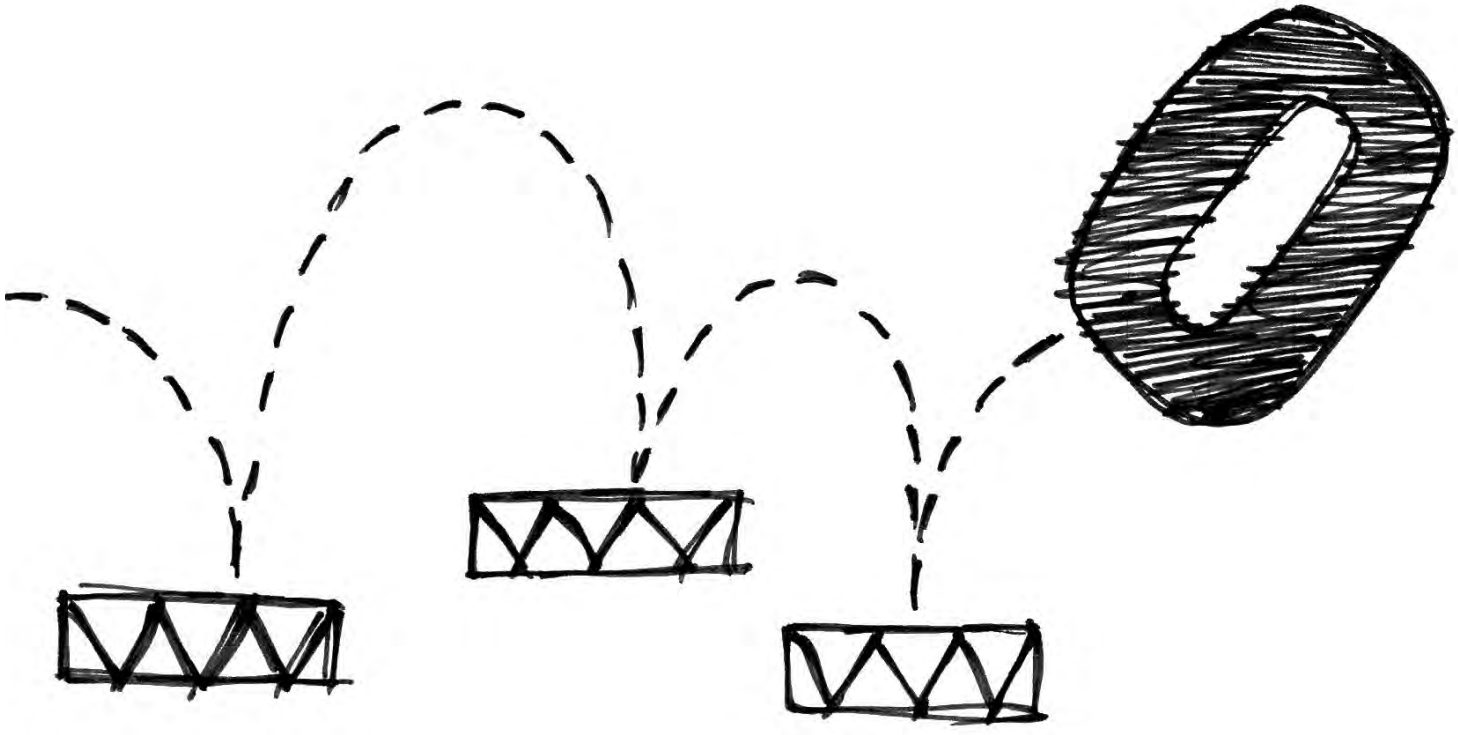
Siobhan Fenton, Associate Dean (Enterprise and Business Engagement) at Teesside University's School of Computing, Engineering & Digital Technologies, said, 'We are really thrilled by the number and scale of Teesside University talent employed by Double Eleven, who we continue to have a great relationship with.

'It is always exciting to see our students embark on their first steps towards careers with digital businesses, especially those which play a key role in helping to develop and retain talent in our region.'



Games & Concept Art

Games and concept art courses at Teesside University have always enjoyed a sterling reputation and with the continuing growth in the North East of budding new independent studios, games and concept art students have many opportunities to become part of this vibrant industry in the area. Our courses cover all aspects of games development. Our students can choose from courses designed for careers in computer games art, games design, games development, games programming and concept art.



Our students have access to dedicated art, games and programming studios, all providing a fantastic learning experience using state-of-the-art facilities. Students also gain real-world experience of the game development process by working in teams to produce playable game demos within a studio environment. The continued support from local companies and larger more established studios helps provide our students with an even greater opportunity to grow and learn their skillsets alongside experienced veterans of their field.

Our Games and Concept Art courses for 2023 - 24:

Undergraduate

- BA (Hons) Games Art
- BA (Hons) Games Design
- BA (Hons) Concept Art
- BSc (Hons) Games Programming

Postgraduate

- MA 3D Games Art
- MA Concept Art
- MA Games Design
- MSc Computer Games Programming

BA (Hons) Computer Games Art

Ro Atkinson

Break's Character Creator Demo

I am a character artist who is showing off my work being customisable and workable to generate either main characters, or crowds of characters. The range of customisation should be with the materials, outfits and faces to give the characters a range of depth and difference without needing to worry about re-sculpting and re-topologising for each individual character made.

Aimy Chamberlain

Dodeer Different Dimensions

The Dodeer is an adorable, gentle creature seen in the woodlands. This is a creature piece I sculpted from a piece of concept art. I did this creature in both a stylized and realistic art style. I developed my sculpting and technical skills, as well as branched out and proved my versatility and ability to work within different workflows and pipelines.

Jake Dougherty

Blood Pool

The artefact is exhibited in a closed environment around the consequences of a battle in severe weather conditions. I've developed my skills in Unreal Engine as I've done lots of research in how lighting and atmosphere can really impact the mood of the environment as well as bringing in other elements such as water and weather. I've also become very familiar with working in a semi-stylized workflow, as I felt working with in this style would be more challenging and fun for me.

Conaire Durkin
Gothic Cathedral

My exhibition is on the interior environment of a *Bloodborne*-inspired cathedral presented in Unreal Engine 5.

Reece Gibney
Dystopian Casino

For this project I have created a casino from a dystopian future where gambling has infested every aspect of society.

Charley Hargreaves
Bakery – Life After Us – My Final Year Production

I wanted to bring together all the skills I had learnt over the course of my degree and create a beautiful environment, one full of story and great assets. I have taken my passion for plants and created an overgrown decaying bakery shop, left standing 20 years after an apocalypse occurred.

Chris Jess

Tropical Shipwreck Diorama

The diorama is a tropical island based around the Fiji islands. It is set in the 17th century and on the island there is a shipwreck and cannon balls to suggest a battle. I used the front of the ship as a shelter with a campfire inside it as the main point of interest of my diorama. There is a treasure chest and a cluster of foliage as additional points of interest.

This piece will be stylised, heavily inspired by *Sea of Thieves*.

Yew Qin Lim

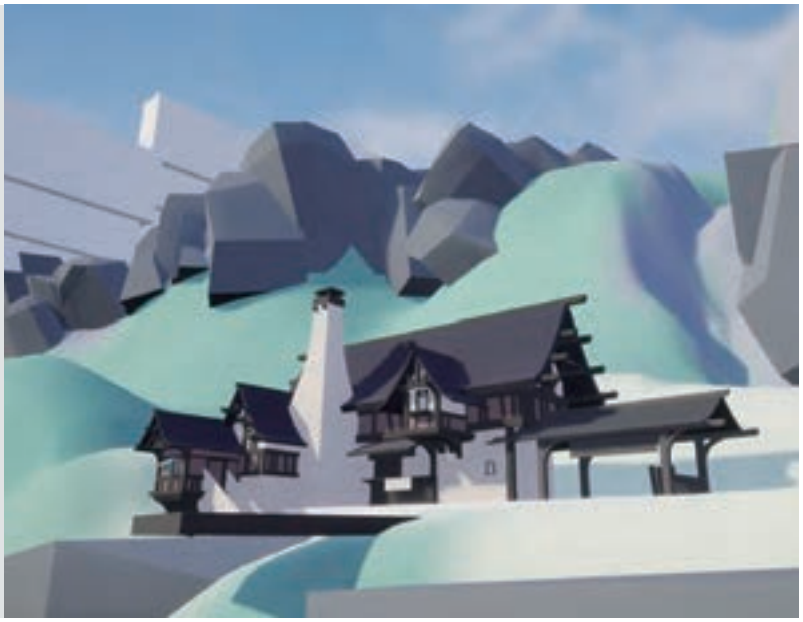
Concept Art and 3D Character Modelling

This project focuses on a character inspired by a cyberpunk theme and Japanese samurai culture. Using Photoshop to first create concept art in a realistic style, exploring designs and different elements, then changing from a 2D version into 3D by using different software such as ZBrush and Maya. The story of this character is about the wandering samurai going on deadly missions to fight for vengeance.

Huanzong Ma

Stylize environment

This work is about a stylize environment created using Maya, Substance Painter, Substance Designer, ZBrush, Unreal Engine 5 and SpeedTree. It will include trees, plants, rocks and landscapes.



Taylor Morton

Aztec Warrior

I created a full character using a concept art piece and then posed it in a small diorama scene. If I have time my goal is to have my character rigged and animated to show I can work using a character workflow that results in an animated character. The focus of my piece is on the organic forms of the body using the concept art from Jordy Knoop. The character is stylized because I feel it represents the forms of the character effectively.

Matthew Nixon

Frostheim's Watch

Frostheim's Watch is a real-time 3D stylised environment set within the depths of a mysterious wintery forest. Deep within the woodlands lies a mystical hideaway, where a lone wizard practises his magic.

Taking some style inspiration from the likes of *Spyro Reignited Trilogy* and *Crash Bandicoot 4: It's About Time*, with slight connotations of Nordic mythology, Frostheim's Watch encompasses a harsh and frigid, yet cosy environment.

My project goal was to refine my stylised art style I have built and showcase my abilities as a 3D artist. I had a heavy focus on Substance Designer, creating many tileable materials which can be adjusted within my master materials in Unreal Engine 5. Other software includes Maya, ZBrush and Substance Painter.

Jake Richards

Project CSS: Technical and Environmental Art

Project CSS/SK.AI.TER is a skater/shooter game, where the character rides a hoverboard and shoots drones.

My role was to be an environment and technical artist, to provide the look and feel for the larger part of the game. The overall theme for the art is cyberpunk, mixed with post-apocalyptic elements. I developed several systems to build this environment including procedural building generators, spline-based placement actors and master material systems.

The art in this project is heavily inspired by cyberpunk media such as *Altered Carbon*, *Cyberpunk 2077* and *Bladerunner*.

Daniel Rickman

Gideon's Tesseract

Gideon's Tesseract is a science-fiction themed experimental rifle that utilises a tesseract as the primary power source. This will be presented primarily with beauty shots and potentially full engine implementation. The piece will be created using Blender, Substance Painter, Marmoset ToolBag, Photoshop and Unreal Engine 5.

Connor Robertson

The City of Strength

For this project I have created a snapshot/set-piece environment of a player-hub area based on the unreleased Riot MMO. I've created this using a similar art style that is used in various Riot Games projects.

The City of Strength is called Noxus, surrounded by harsh uninhabitable steppes terrain that values conquering lands and strength above all. I'll show this by having environmental storytelling, hand-painted textures, materials, and a realistic and believable creation of the city and environment.

Carter Taggart

1987 BMW 635CSi - Brochure Digital Re-creation

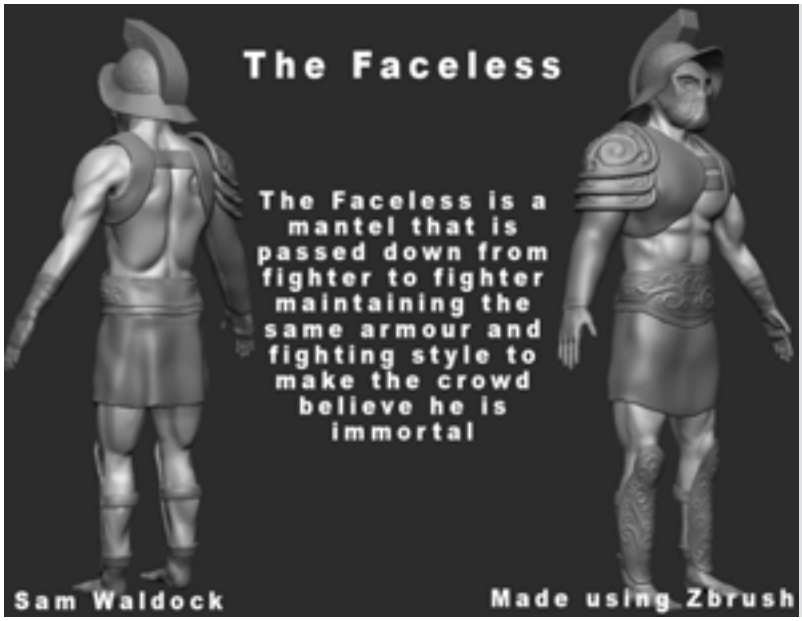
I digitally re-created a sales brochure for a 1987 BMW 635csi by making multiple smaller environments inside of an Unreal Engine 5 scene that are based on the backgrounds of the images in the brochure. I am also modelling a BMW 635CSi. I re-create the brochure inside of Photoshop by taking renders from the Unreal Engine 5 scene. I hope to have the final product printed into a real brochure that can be compared to the physical brochure that I'm currently using for my referencing. To go alongside this, I would also like to produce a rendered video inside of a studio setting that would allow me to showcase some details that may have been missed inside the original brochure.

1987 BMW 635CSi Brochure Re-Creation

Iris Thong

Naga Palace

The Naga Palace, which means the palace of dragons, is a recreation of a 3D interior environment of a South East Asian fantasy-themed palace hall, originally designed by Walt Disney Animation Studios for the film, *Raya and the Last Dragon*. Emphasis has been placed on the aesthetic of the cartoony hand-painted materials and the strong atmosphere created through lighting. This project is a combination of my technical skills, artistic vision and cultural appreciation. It is an opportunity for me to showcase my ability to turn 2D concepts into 3D scenes and to demonstrate hand-painted texturing skills, all while highlighting the beauty and cultural significance of South East Asia.



Sam Waldock

Stylised Character Showcase

I am a character artist who uses Maya, ZBrush, Substance Painter and Unreal Engine 5. I lean more towards stylised characters and have worked on an ogre, Toothless from *How to Train Your Dragon* and a suit of armour.

I've made a main character that is built for combat. He has some light armour made up from a range of materials and texture styles.

Zach Wilkins

Drew's Easy Diner – A 1950s American Environment

Welcome to Drew's Easy Diner! A place to meet friends, unwind after work or simply relax with a coffee. Having been in the community for decades, Drew's is kept afloat by the elderly owners, who run the place – welcoming each customer, both new and old, with a warm smile and a friendly chat.

A 3D environment rendered in Unreal Engine 5, heavily inspired by *Life Is Strange* and using the hyper-realistic art style of Naughty Dog, Drew's Easy Diner has been built from the ground up using Maya, Adobe Substance Package, Quixel Mixer and Marvellous Designer.

Jesse Zhang

Cyberpunk Tulou

A traditional Chinese tulou with a cyberpunk style. I explored the possibilities of fusing cyberpunk with traditional architecture to produce a techno-inspired environment.

Focusing on the standard process of environment modelling, using Maya, Substance Painter and Unreal Engine. With a low poly, high poly workflow in Maya and Substance Painter for materials and textures and Unreal Engine for asset placement and lighting.

BA (Hons) Computer Games Design

Stefano Alessandroni

Colou Arcana

I have created a 2D beat 'em up with some rogue-like elements.

You are a wizard in a black and white world, you need to fight monsters with various spells you find throughout the level.

It's a 2D game that uses pixel art for Its environment and characters.

Craig Atkinson

Tea for Tragedy

I designed and created a crime-solving game where an elderly woman named Doris is almost poisoned by her supposed friend, but her friend drinks the poison instead, leaving Doris to try and figure out why she was targeted. The game mechanics are based on the board game and app, *Chronicles of Crime*. I used Unreal Engine 5, using a mix of UI menus and blueprinting. I have pushed myself to create a more complex game than I have previously attempted.

Matthew Baty
Overslept

My final-year project is an old-school horde FPS game. Whilst developing the game, I was able to use and enhance my skills in Unreal Engine 4, particularly around AI, as well as expand my knowledge on level design in FPS games.

Fiona Beattie
Spectral Sneak

Spectral Sneak is a stealth adventure puzzle game developed in Unreal Engine 5. The player must traverse as a ghost through the areas, completing puzzles to progress while staying hidden within the shadows to not get caught by the exploring children. As I primarily focus on gameplay mechanics and technical design, this project is a great showcase of all the skills I've learned within Unreal Engine, specifically blueprints and AI behaviour trees, while still featuring important areas such as UI and level design.

Christopher Blanchard
Doorway to Hell

Doorway to Hell is a fantasy action-adventure game set in a forest in the medieval era. This game has one level with the primary focus being on level design using skills such as affordances, signifiers and level flow.

Matthew Brinton

The End Of The Living

The End Of The Living, is a third-person survival horror adventure game set in an urban city in the US, known as Roseville. The world has been overrun by the Hozak virus which originated in Africa and has now spread throughout the world within a matter of months. The game will take the player on a journey to find a cure for their infected brother.

During this project I undertook the level design process, going through the creation of layouts, the blockout and polishing the final product. I have created mechanics to complement the overall level design, allowing the player to interact with the world.

Brendt Childs

Lilies to the End: A Narrative Work

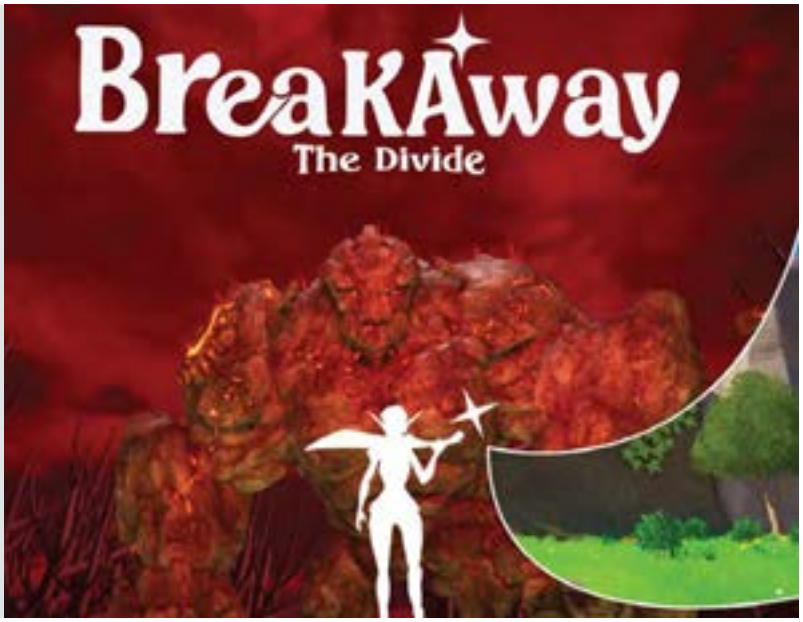
For my final-year project, I created a narrative piece styled after visual novels depicting the afterlife and the consequences of death on the dead. My piece develops my skills in depicting difficult concepts and subjects such as death, with ethical considerations and both thematic and mythological considerations. Lilies to the End is based in the underworld's Greek mythos, mainly focusing on the plain of neutrality where souls neither good nor bad went to die, the Fields of Asphodel. By using such mythos, I have developed my research skills into inspirations to be used within story writing and narrative.

Dylan Clemenson

Breakaway

Breakaway is an exploration game that combines adventure with defeating enemies and aiding others to unlock uncharted territories and progress towards defeating the ultimate antagonist, Zephire.

During the planning and development phases of my project, I have gained a significant amount of knowledge. Regarding research of open-world explorers, I investigated ways to captivate the player and direct their attention towards the progression of the map design. The combat has undergone numerous iterations based on feedback and playtesting. I have focused on aspects such as timing, defensive and offensive balance, enemy attack rate and overall engagement, especially when the player faces multiple enemies at once.



Nathan Coatsworth

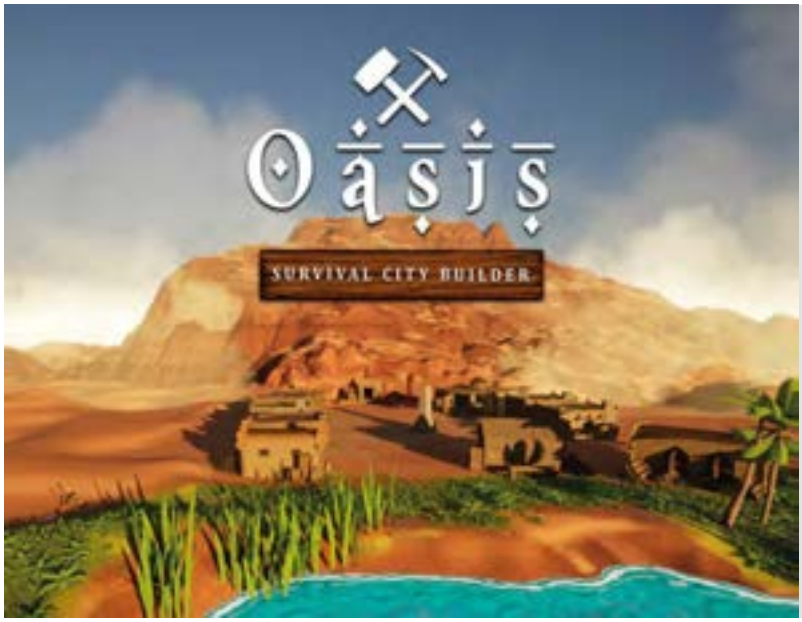
Melee Mayhem

This is a short experience, covering how to make fighting games feel. It contains multiple gameplay elements, like projection, warping, combo system and abilities. There are supporting gameplay elements that have a focus on showing the combat in action. This is encapsulated within a level that will have dynamic arenas, changing as the player progresses.

Jonathon Cromarty

Project: Prism

An RPG with platformer elements, where the player can explore an island to find new items and fight enemies. The way to fight enemies is unconventional – you use your platforming skills to touch orbs that spawn around an arena that is generated when starting a fight, dealing damage to the enemies that way.



Peter Döerstel

Oasis

Oasis is a survival city builder game, where you need to build a town and a working economy.

Your city is in the middle of a desert. Freezing temperatures during the night force you to use precious wood reserves to keep your citizens warm. During the day extreme heat lowers the production of your workers. Throughout the game, multiple desert storms will hinder work even further.

This was my first time working on a strategy game. I created this prototype entirely in Unreal Engine 5 using only the Unreal Engine 5 Blueprint system. During my three months of production, I learned about strategy game economies and how to balance them.

Stuart Douglas

George's Journey

George's Journey is a third person sandbox environment featuring physics-based puzzles and varying player powers that can be equipped by collecting power cards.

The project was created using Unreal Engine 5 and takes advantage of the Chaos Fracture system.

The player takes the role of George, a young boy who falls asleep and is transported to various locales within his dreams.

The project is aimed primarily at ages five to 12, and will specifically aim to appeal to children with an enquiring mind. The game will be non-violent and accessible with a simple control scheme and child-friendly themes.

The skills developed through this project will be an understanding of working to a specific theme, the use of physics in games and the ability to tailor problems to different audiences.

Charlie Fleming

Dungeoneers

Dungeoneers is a project created in Unreal Engine 5.

The game project is a multiplayer 1 vs 4 style game in which one player will play as a dungeon master controlling a board with different abilities and generating a map with various encounters for the other four players to play through. This dungeon runner side of the game focuses on players working together and using various skills to fight through the dungeon created and collect loot to increase their overall power.

The game will conclude with a boss battle between the dungeon master and the dungeon runners.

Kay Johnston

SK.AI.TER

SK.AI.TER is a third-person cyberpunk skater shooter survival game where players take on the role of a hoverboarder navigating a large open city, executing daring tricks and stunts while fending off murderous drones. As they perform tricks, their points from drone kills are multiplied, adding an extra layer of strategy to the gameplay. With fast-paced action and a unique blend of skateboarding and survival mechanics, this game provides an intense and thrilling experience for players looking for a challenge. Whether they're grinding rails, pulling off 360-degree flips or blasting drones with their weapons, players must stay on their toes to stay alive in this dangerous cityscape.

Ziyuan Liu

Wake Grandpa Up

Wake Grandpa Up is a game in memory of my dear grandpa.

It's a puzzle game with shooting elements, inspired by time travel and some knowledge about respiratory medicine. The protagonist has lost his grandfather, but the protagonist cannot accept this because he was the one who grew up with him. The protagonist finds out on the internet why his grandfather died of natural causes. The protagonist regrets not having gone to his grandfather's house earlier to wake him up. In the protagonist's dream, the protagonist meets God and passes God's test to be able to go back to the hours before his grandfather died. There are many challenges and puzzles in God's test, players will encounter monsters and will also encounter many puzzle mechanics that they will need to deal with.

Luke Manning

Experience the History: Defence Area 35

My project uses virtual reality and Unreal Engine 5 to recreate the Freiston shore coastal defences as they were during the Second World War, with the goal being to create an interactive educational experience that can be used by the nearby We'll Meet Again Museum to show what the site was originally like.

I developed VR production skills as well as many new skills in Unreal Engine 5 whilst working on this project.

Zak Nelson

Pokémon: Ranger Ranch

Pokémon: Ranger Ranch is a game built to challenge myself technically by using an un-common gameplay style.

It also acted as a passion project for me due to my combined love of the *Pokémon* and *Viva Piñata* franchises.

I've been working on a game built around optimisation and a strong foundation, creating module scripts, DRY code and designing tools for easy content creation and new mechanic implementation.

Josh Paylor

Krymor

This is a top-down fantasy heisting game, heavily inspired by the *Payday* series. You play as someone tasked with cleansing the world of a sentient corruption known as the Krymor. The world is a mix of fantasy and modern, so you will have access to a variety of guns and magic spells to help you out. I specialise in designing game mechanics and systems, so most of my time was spent creating a variety of systems to improve the flow of gameplay, particularly during combat. The game was made in Unreal Engine 4.

Daisy Pickard

Princess Party

Catrine has been locked in her tower for 40 years. She was the second child of King Alwyn and Queen Nora. She was told that she would have everything she needed, and the swamp troll outside wouldn't hurt her, but she had to wait for a mighty hero to come and save her. After years of watching heroes go by and ignoring her, she sneaks out of her tower with little more than a knife and some supplies and sets out to get revenge on the heroes.

Princess Party is a 2D turn-based RPG made in Unity. It has a targeting system in combat that allows players to deal more or less damage by hitting different parts of monsters with different weapons. It also includes several cutscenes to show the story, multiple enemies, NPCs to interact with in a town, an overworld, and a boss with a dungeon. This project is intended to be the best way to showcase both my narrative and gameplay design skills.

Kai Rees

The Regicide Pit

For my final-year project, I made The Regicide Pit, a first-person shooter where the objective is to complete each level using your wit, skill and the environment. The different levels showcase different styles of gameplay with a puzzle, exploratory level and fast-paced speed running level. With this project I am mainly focused on level design while expanding my knowledge on gameplay design and learning about artificial intelligence. This was made in Unreal Engine 5.

Stefan Rogers

Ravenrook Inn

My game is an inn keeper simulator, where the player must collect resources to extend the inn, make furniture of varying qualities as well as collect new ingredients for food, drink and potions in the hopes to raise the star rating of the inn. All while exploring the enchanted fantasy forest in the remote valley of Ravenrook. The NPCs that come to visit have a variety of wants and needs such as different meals, beds to sleep in and potions to consume.

Tyler Rotherham

Mortal Fallacy – A turn-based tactical RPG framework

Mortal Fallacy facilitates creative use of each unit's psychology to challenge and immerse players. It combines the stress system of *Darkest Dungeon* with the strategic gameplay of *X-COM* into the package of a third-person shooter.

The psychology aspect is shown through the pressure system. Pressure is gained in specific situations (seeing an ally die, missing shots). Each unit has three pressure quirks unique to them which will activate under different environmental contexts relating to their backstories (a unit with claustrophobia would gain pressure in tight spaces). Building pressure will incur stat changes, and maximum pressure will trigger a breakdown which will make the player unable to use that unit for a turn. Instead, units are controlled by AI to either retreat or rampage, either of which makes the outcome of battle unpredictable.

Zac Thompson

As The Sun Dies

A first-person narrative environment about heartbreak, a motel and an eldritch cult. You play as an off-duty detective taking leave to explore the open road, who stops into a motel to rest and refuel. Here you discover the completely empty motel, not a soul in sight, but clearly recently vacant. Here you can explore the motel almost in its entirety, from the reception desk, each room and the motel's grounds. Each room has its own story, but also shares one with others interlinking until the bitter end.

This game features item inspection, allowing the player to explore not only the rooms, but the stories carried by its contents. The environment tells a story of the motel's former inhabitants, giving them personality and alluding to their fates.

BA (Hons) Concept Art

Beth Andrew

Throne of Glass: an Animated Film Concept

I decided to adapt *Throne of Glass* by Sarah J Maas, a young adult fantasy novel, into a concept for an animated film. I was interested in exploring character and environmental concept art, and using these designs to create key scene concepts.

The protagonist Celeana, an undercover assassin, must go through a tournament in a castle while also solving the mystery given to her by a ghost and avoiding the creature stalking the halls. I had to keep my style clean and simple for the intended media yet create interest through shape language and silhouette. Using narrative in my designs to show the storytelling of the source material was a big focus of this project, alongside extensive design research and mood board development.

Benedicta Detya Auberta

Bawang Merah & Bawang Putih – A Visual Novel

My work focuses on character concept designs and illustrations for video games and tabletop RPG games. This project aims to create visual development for a visual novel/dating sim based on the Indonesian-Malaysian folktale, *Bawang Merah & Bawang Putih*. Using Photoshop and Blender, I have produced concept art, usable game assets for the Ren'Py Engine, as well as promotional material for this visual novel to showcase my versatility as an artist.

Pierce Bashford

Tiny Tina Wonderlands – Weapon DLC

As an aspiring weapon designer, I wanted to create a DLC pack for the game *Tiny Tina's Wonderlands*, which mixes fantasy from the *Dungeons & Dragons* world and its original game, Borderlands. I wanted to create designs based on a Dungeons & Dragons book and design my own weapons which could be recognised as the spells, items or class.

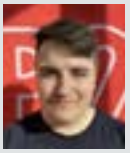
Throughout designing these weapons, I have learned to adapt to a new style and render a specific way. As a concept artist I wanted to try to keep to hand-rendering to develop that skill further and understand how to create material through digital art before one day moving over to 3D renders.

Photoshop, Procreate, ZBrush and Flame Painter were the programs used to create these weapons.

Laura Bibby

Overgrown – Concept Art Project

I am showcasing my final-year concept artwork that I have created. It shows the skills that I have developed and how I portray my ideas in a unique and appealing way. My project called Overgrown features a fantastical land of monsters both big and small, dwarves and elves. The piece focuses more on the creature and character development rather than environments.



Thomas Donaghy

Ratchet & Clank – Race Against Time

My work will focus on the pre-production pipeline for all types of asset creation from hard surface weapons, organic creatures and everything in between. I have chosen one of my favourite videogame franchises from my childhood as a basis for the designs and hope to capture the essence of these great games. During this project, I have learned a lot about design, painting and time efficiency.

Lei Fu

Concept art: Death Stranding – The Ultimate Traveller

This concept project is about the video game *Death Stranding* DLC. It talks about a new character who is born from the death beach. It shows the character design, creature design, environment design and some key moments. I used Photoshop and 3ds Max to create my artwork.

Crow Gibson

Umbrella Academy: House of Fools Concept Art Project

I'm displaying a series of tarot cards with redesigns of characters and props from the TV and comic series, *The Umbrella Academy*. These designs are inspired by the style of art nouveau, particularly artists such as Alphonse Mucha and Louis Comfort Tiffany, and 19th-century fashion between the years of 1860 and 1900.

I have produced card designs, including a card back design that I used InDesign to help me create. Any illustrations are done in Procreate and Clip Studio Paint.

Morgan Heathorn

Wanderers

I've chosen to show character and environment concept art along with a storyboard for an episode of the adult animated mini-series I've created called Wanderers. I've improved my skills within creating more animated characters placed within atmospheric environments, creating strong narrative scenes within the storyboard that would make you want to see more.

Hassan Howlader

Final Major Project

I've chosen to showcase my final-year project, Solar. Concept art for a Pixar-inspired animated short film following the journey of three newborn stars through the solar system. I've created key scenes from this film to showcase my illustration and colour skills. I've also created development pages showcasing my character and creature design skills.

This project has heavy inspiration from astrology, scientific facts about our solar system as well as a meaningful story full of lessons and colourful visuals, which can be appreciated by any audience.

Ping Tim Hwong

The Ethereal Warden (Destiny 2 Expansion)

A legend myth was spread across the community gossiping about a group of unsung heroes who had fought against evil incarnations for eternity after the dark age. Their identity is hardly known by anyone and they believe they were chosen to protect the ruin at all costs.

They have been protecting a ruin that shoots a massive beam of light which they believe was a power source and life force for the traveller. It must be protected at all costs. Despite the wide spread of the rumour, no one knows if this is real or not and if the group of guardians has ever existed. You are tasked to investigate the loud boom from a planet outside the solar system. Find out what happened and report it back to headquarters.

Danish Fitri Bin Jaslani

Totems

My project is a concept that can be used as a foundation for a video game, set in a dark fantasy with a Mesoamerican aesthetic mixed in with various indigenous tribes from the east. The project was primarily done in Photoshop and Procreate.

Boyang Jiang

Love and Gravity

I'm using original characters to tell a story that takes place between the children of the gods in a universe abandoned by its creator.

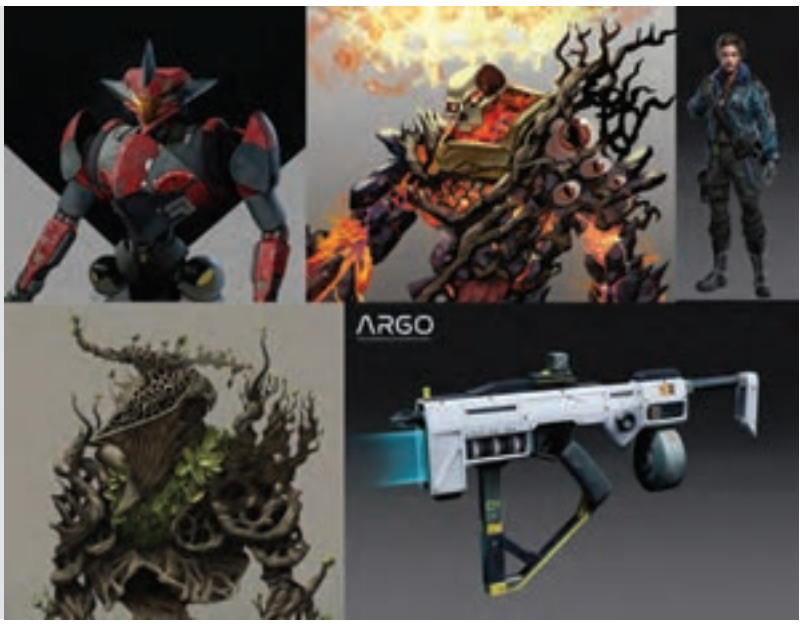
It's a text adventure RPG like *Disco Elysium* about a pack of mechanical angels with advanced technology, a mercenary from a civilised planet that relies heavily on magic and cold weapons, and the last creature of the gods who wanders among mortals looking for meaning in his life after being betrayed and abandoned.

When these three people meet, how are they going to save the peaceful planet Sai'kunds, which is about to be caught in a cosmic war. For this project I used Photoshop, Procreate and Blender.

Huang Wai Lai

Marcus Lai Designs

My goal is to showcase researched-based designs and callouts. I would like to showcase my skill in providing suitable solutions to design problems. I have developed the skills to correctly complete a concept design task from beginning to end. I am very skilled in Photoshop and wish to showcase that.



See Hui Liew

The Search

A unique group of tribal people have evolved in the forest from the last century. These people have developed a deep connection with the creatures and have built a thriving community that lives in harmony with nature. However, their way of life is threatened when a natural disaster strikes, leaving the forest unable to provide the resources for their survival. The protagonist and her people are determined to discover the land and search for their future home.

The Search is a world-creating project for potential future game production. The background setting of this project is based mainly in South East Asia. I used Photoshop to do sketches, iterations and finals. PureRef is used to compile my references. I have also used Blender to improve my workflow.

Yuan Liew

BIA: The Crystal Infection

I have chosen to showcase my concepts for a potential 2D platformer action-adventure metroidvania-style game. My main goal with this project is to showcase my skill in rendering and designing environments, and my ability to design unique characters and creatures. I have an interest in world-building and environmental storytelling. My biggest inspiration for this is *Ori and the Blind Forest* and *Hollow Knight*, two indie games that I admire for their visual storytelling and minimal use of text. With that in mind, my focus with this project is to create a well-rendered enough environment so that it could be used in the final version of the game, keeping in mind that the character needs to be able to traverse the terrain.

Kay Lindsay

Mascot Horror Games Project – A study of current horror indie games

I have identified effective areas that have resulted in the rising popularity of mascot horror indie games over the past ten years.

I have completed my research into this area and have used what I have learned to create production art for a fictional project using this theme and developing ideas that would work effectively for this genre. As well as providing an effective use of key design traits and themes that resulted in the success of similar projects.

I have chosen this project as I would like to work on indie projects in the future, and I feel that this would help me with identifying areas that are successful, and give a clear idea of how to integrate concept art for this industry into my portfolio.

Yi Tong Lim

Mucize

My project is about game concept design. The war that was sparked by the depletion of resources and their decision to grab energy elsewhere to survive.

Zhaohan Lin

Holy War

I will used Photoshop and 3D tools to represent my work, which includes character design, prop design and environment design.

Val Lukovics

The World of Nethersoul

I am excited to present my concept art for Nethersoul, an MMORPG set in a magical dimension inhabited by diverse creatures living in eternal strife. With a focus on meticulous research and world-building, I wanted to create a believable and immersive fantasy setting that would captivate players.

My concept art features mainly environments, but includes intricately designed artefacts, ruins, creatures, and armour and weapon sets. With my storyboard, I was committed to bringing the realm of Nethersoul to life and showing just a few characters that inhabit the vast land. My biggest development during the project was combining techniques I have used before, like using 3D programs, creating assets and photobashing.

Harvey McCallum

Character & Environment Concept Art

I will be presenting various works of concept art including character and environment designs, callouts and early development stages. This presentation will include some older pieces of my work, as well as my most recent final-year major project content. This project is focused on conceptualising the designs of characters and environments for the third film in the *Avatar* franchise.

The skills on display will include 2D digital art using Photoshop. 3D elements will also be included, created using Maya, Z-Brush and Blender.

Jess McQuade

Haunted Ground

Haunted Ground is a collection of concept art to illustrate the visual identity and groundwork of a theoretical game within the narrative-choice-based *The Dark Pictures Anthology* series, developed by Supermassive Games. I set out to design the five main playable protagonists of the game, all with vastly different motivations, backstories and personalities. The main threat of the game, sirens utilise shapeshifting to try and catch the protagonists off guard, and keyframe illustrations depict vital choice moments that the player will face. This project forced me to adapt my workflow to be more efficient and reliable, with designing five characters simultaneously that are the centre point of the game. I also developed my skills using 3D, digital painting, photobashing and rendering to create the concepts.

Gabriel Midgley

Rivendell Environment Design

A faithful redesign of Rivendell, the iconic location from *The Lord of the Rings*. Designed with the context of a fantasy RPG in mind, I utilised a lot of techniques such as photobashing, drawing and painting on Photoshop, and 3D modelling in Maya.

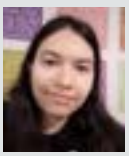
Diogo De Amorim Miranda

Cosmos Collide

In this project I developed skins and splash art for a popular video game, *League of Legends* by Riot Games. I applied my Photoshop skills throughout to create a relevant body of work that fits into the creation of cosmetics within the video game industry.

During the elaboration of this task, I piloted my attention to the art style suitable and desired for the art direction required to fit the game.

I aimed at creating cohesive concepts grounded within the already existing expectations for the game while also expanding and exploring new pathways and visual languages for the chosen theme.



Lucia Guerreiro Pires

Project Neon

My project is an art book showcasing the art for the hypothetical game called Project Neon, a cyberpunk metroidvania that follows the story of a nobody that seemed to have been chosen as the one to change the status quo of the city that she resides in. Little did she know that things aren't as they seem. The book explores the characters in the game and the world that they reside in through rendered artwork and how these rendered designs came to be through development pieces. I have showcased knowledge of various fields of concept art and game production pipelines, doing my best to immerse the viewer in a new intellectual property.

James Russell
Accretion

My project is an artbook showcasing conceptual designs and worldbuilding for a hypothetical third person survival-horror video game project titled Accretion. The game plays out the struggles of a courier stranded upon a space station infested with cosmic horrors as they struggle to find their way out. The book showcases snippets of the desolate space station as well as the enemies you will face and the entity pulling the strings through detailed development breakdowns, fully rendered design works and 3D explorations. The project showcases my knowledge of various aspects of concept art to create unique characters, creatures and worldbuilding for an exciting new intellectual property.

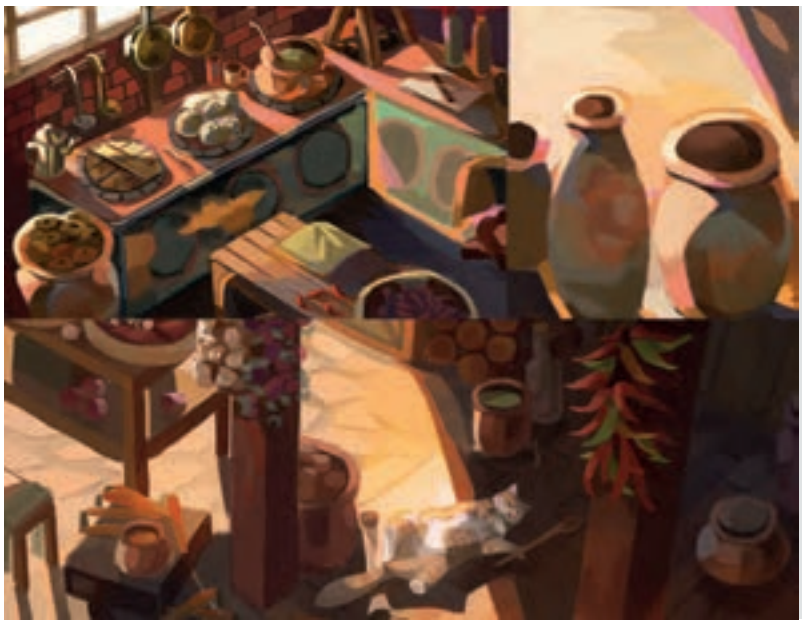
Zhi Shen Tang
Eternal

I have created hero, prop and environment designs inspired by *NARAKA: BLADEPOINT,* a game set in a fantasy world where the two gods of yin and yang have killed each other, plunging the world into eternal catastrophe. In the game, players take on the role of a hero who must gather resources, fight against other players and survive. I am using Photoshop and Blender as my primary software tools for this project.

Maddy Yarnold
Strandmerth's Secret

Strandmerth's Secret tells the tale of five player characters at the heart of a dark psychological horror-themed *Dungeons & Dragons* campaign. My work spans the creation of an illustration and a character turnaround for each of the involved player characters on a client-commission basis, overseen by the dungeon master.

In this, my skills will be on show through the whole development pipeline from the initial concepts through to the final pieces. This includes exhibiting fundamental skills, responding to client feedback and creating cohesive works displaying individuality while being able to identify that each belongs to the same source material.



Grace Ru Yin

Visual Development

I am exhibiting my project, The Shepherd, and some personal concept projects to showcase my skill as a visual development artist. My portfolio will be showcasing an array of beautiful pieces with years of hard work and practice, from nature studies to building my own world. My pieces usually focus on the day-to-day life, nature appreciation and lots of colour play.

Bethany Young

Project Naturelics

My project includes characters, environments, creatures and assets where I used methods such as 3D and digital painting. It is based around a collectable-style game in which you as the main character, an alien coming to earth millions of years in the future, collect, curate, and sell fossils and gemstones. My art book displays the development process, final pieces and information, themed concept art and working on new things such as asset and UI design.

Sichen Zhou

The character design and environment design

My work shows my character and scene design. All projects use Photoshop. During the design process, I paid attention to practicality and authenticity. I hope that the character and living habits of the character can be told through my design.

BA (Hons) Indie Games Development

Noctis D'souza

Shutterbugs

The principle of my game is you, as the player, run around a forest exploring the area and searching for strange creatures. On finding a creature, the player then takes photos to complete a photo journal. The player must not get too close as this will scare the creature and it will run away. There are three zones with different themes and styles to each. The intention of this is to demonstrate artistic versatility presented in an interesting and engaging way.

Having not been trained, this process has been constructive in that I have learnt how to present work as a concept artist. I am making needlefelt versions of some of my characters to demonstrate that my designs also work as 3D models.

Leon Hirst

Exploring Engaging Level Design With Quake

This is a collection of levels designed for the existing game, *Quake*. I aimed to create an experience that demonstrates my skillset in designing engaging and exciting levels. Various spatial design elements such as verticality, pinch points, flow states and level pacing were used to create levels that keep a player's attention and are enjoyable to explore and play through. This project reflects everything I have learned surrounding the subjects of game and level design, and is a piece that allowed me to showcase my skills in creating memorable experiences in a game.

BSc (Hons) Computer Games Programming

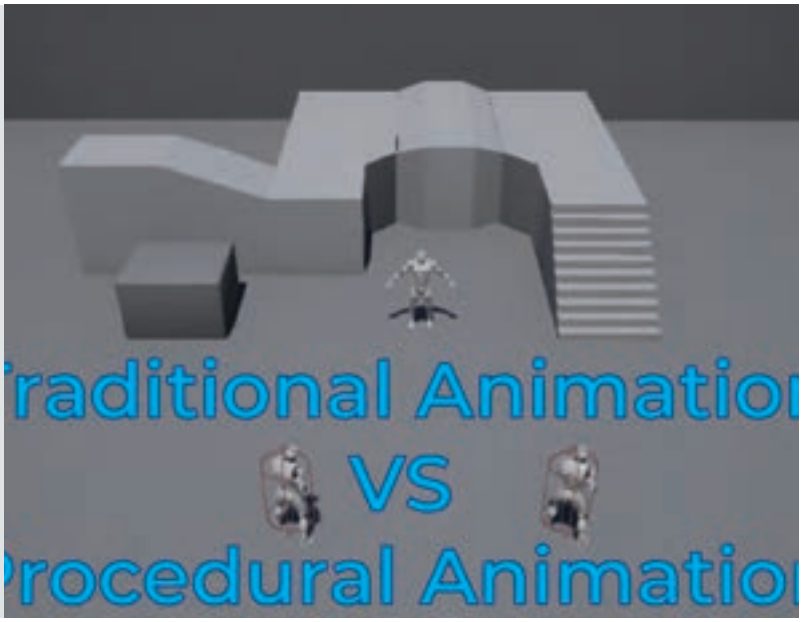
Jay Bunch

Traditional Animation vs Procedural Animation

My exhibition showcases a comparison between traditional animation techniques and procedural animation techniques in the context of a player-controlled third person perspective 3D character. The project examines locomotion modes of walking, running and strafing, while locked on to an enemy, with the aim of creating a character that feels like a character from a game like *Dark Souls* or *Elden Ring*.

To demonstrate the differences between the two techniques, I implemented two characters that the player can control and switch between. The first was created using traditional animation techniques. The second was implemented using procedural animation techniques, while also offering a more realistic depiction of human movement.

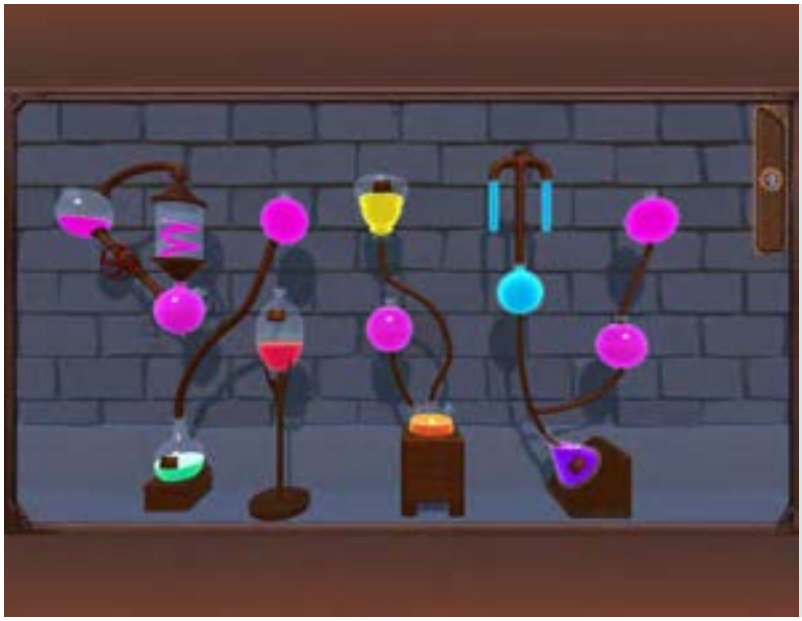
My project report and development blog explore the question of whether it is worth implementing procedural animation for locomotion. The project was developed using Scrum methodology and delivered using Unreal Engine 4.



Andrew Richardson
Tower in the Woods

A tower defence game developed by a team from multiple disciplines. The game has been created as a project to exhibit the skills learnt while studying including C# programming, level design, character art and environment art. The objective of the game is to defend the base from waves of invading enemies. This project is being developed within Unity to allow for release on a wide range of platforms.

BSc (Hons) Technical Games Development



Bailey Angus
Almechanical

My project is focused on the development of an alchemy mechanic as the primary gameplay loop. This alchemy mechanic includes multiple crafting processes such as boiling and distilling to produce products which you then sell to your customers. Each product is a puzzle on how to craft it with the ingredients you have, what properties you need and how to get there. They start out simple but as you progress the products require more and more steps and ingredients to create, calling for more intense logical reasoning and planning. This was developed to demonstrate my capability of designing and developing complex mechanical systems for games.

Uncas Murtagh
Soul Shards AI

This project focuses on the creation and technical implementation of AI for a souls-like experience. The project highlights three bosses with unique behaviours, a Snake Hydra, Crystal Spider and a Sorcerer. Each boss has three grunt-type enemies and the grunts for all the bosses have the same behaviours. These behaviours are melee, which will attack the player then circle them and attack again; ranged, that will use magic while trying to keep away from the player; and a grunt that starts off ranged but if the player gets close will use a melee weapon, then change back to range if they get far enough from the player. All grunts can interact with the world around them. This project has been designed so the grunts are reusable and expandable for additional bosses. Furthermore, it has been made into a demo to show off the AI's capabilities.

George Wood
Game Design

My final-year project, Mainframe, is a science-fiction stealth game developed on Unreal Engine 4. It takes inspiration from *Metal Gear Solid* and *Resident Evil* as well as films like *2001: A Space Odyssey* and *Alien*. The player must traverse through an abandoned spaceship, avoiding dangerous robots and a murderous artificial intelligence that is intent on stopping them. It's a showcase of the level and gameplay design skills I have worked to develop.

MComp (Hons) Computer Games Design

Ryan Mountford
Hairdresser Game

Hairdresser Game is a 2D RPG business simulator. You run a barber shop, however in this universe running a barber shop is not as you'd expect. To do your job you must fight hair in unique RPG combat, making use of items and skills to keep your customers satisfied. Using the money earned you can upgrade the store and train your staff to become stronger.

Antanas Nikzentaitis
Nocturnal

Nocturnal is a first-person psychological horror experience inspired by *Resident Evil*, *Silent Hill* and *Murder Castle of Chicago*. In the game, the player is a journalist who is obsessed with supernatural activity in the manor where a ghost is active at night. The main objective is to escape the manor, while being challenged by the ghost, puzzles and other hidden features, such as moving walls. I developed my skills through exploring various level design techniques, blueprinting in Unreal Engine 5 as well as 3D asset creation, utilising Maya and Substance Painter.

Tom Wilkinson

RPG Framework

I have designed and implemented a selection of core systems commonly found in RPGs. They have been designed to be expandable and customisable, serving as a flexible starting point that can be used for rapid prototyping of game concepts. My goals for this project were to develop and showcase my gameplay system and backend design skills, and focus on a forward-thinking design philosophy that will be useful for | future projects.

MComp (Hons) Computer Games Programming

Alan Bednarski

Fracturing and destruction of geometry using Unreal Engine

The aim of the project was to study how to make real-time fracturing and destruction happen and if it was possible during runtime without the need of pre-fracturing the geometry, and to see if you can do it all without using external programs such as Blender. The skills I have developed while producing this body of work have been gaining experience with using Unreal Engine and using C++ in the engine, as well as getting a better understanding of geometry maths and 3D graphics programming.

Sean Nichols

Procedural Generation of Terrain and Cave System

Procedurally generating a cave system in Unity using cellular automata and marching squares for the mesh generation. Included are a few interactive elements, such as a stamina bar, a grapple hook and simple AI as something hunts you within the cave.

MA 3D Games Art

Oana Enache
Realistic 3D Character for Cinematics

The project consists of a realistic 3D female character inspired by the indigenous people of Brazil. The character is a full body 3D character that can be used for film and cinematics.

The production of this character aimed for the most realistic visuals and involved various techniques such as the implementation of real face scans from XYZ Textures and 3D hair simulation in XGen and Maya, as well as physics-based cloth simulation in Marvelous Designer.

I have developed skills such as anatomy, realistic texturing, cloth and hair simulation, topology for animation and rendering skills.

Ritwij Kulkarni
Expanding Knowledge

A 3D desert game environment that utilises many new features of Unreal Engine 5, while keeping the level running at a stable 60 frames per second on most modern graphics cards. The aim of the project was to fill the environment with high-quality assets, particle effects and miscellaneous effects while maintaining a stable frame rate. The project combines old school and modern techniques used in game asset production pipelines to achieve the aim set.

Oliver Rushen
Character art of Oli Rushen

One of the display pieces are two Jamaican gang members I created while interning for AquaBlu Games. I gained a greater technical understanding of complex shaders relating to eyes, hair and skin through studying Unreal Engines metahuman assets. I also developed my animation skills by rigging, weight painting and posing these characters in my spare time to widen my skillset.

The other pieces are from my undergraduate and postgraduate studies where I developed a grounding in all the necessary skills for character art. My final-year piece is inspired by the *Outlast* games and tested my existing skills in character art and added to them through use of industry-standard software I wasn't familiar with before, such as Marvelous Designer for clothing and FiberShop for hair.

MA Concept Art

Corey Braggs

Storytelling in Environment and Prop Design

I have presented a range of my work, focusing on environment and prop design. I have a strong interest in how stories can be portrayed through these mediums, and the way they communicate a narrative. Focusing on the fundamentals, such as perspective and form, I have strived to showcase my adaptability across a range of genres and styles.

The concepts I have presented are a collection of my second semester briefs, as well as some personal projects of my own. During these projects I have developed stronger skills using perspective in more creative ways, as well as making forms that present interesting shapes.

Nathalie Chan

Sapphire Ire

A concept told with character art, storyboarding and illustrations.

Zihao Chen

Sounds of Bamboo

My project is called Sound of Bamboo, which is the concept art about a game inspired by *The Legend of Zelda: Breath of the Wild* and *It Takes Two*.

The story about this game is a wandering peddler accompanying a kid and teaching him about how to play magic music like the kid's father on their journey in a mountain full of bamboo.

I'm using Photoshop and Blender to help me finish this project.

Robyn Dyboll

Pankration

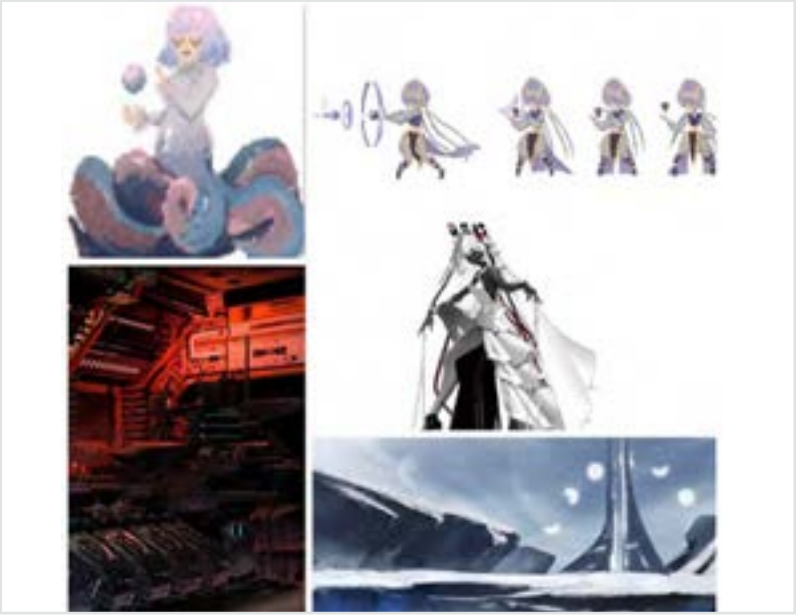
I am showcasing a collection of character designs for a personal project called Pankration, alongside additional concept art and splash illustrations. Pankration is a fighting game concept with a light-hearted tone inspired by the theatrical nature of pro-wrestling. Its intent is to playfully satirise fighting game characters and storylines, while also letting itself indulge in that same silliness. Other inspirations include *Guilty Gear*, *Kill la Kill* and *No More Heroes*.

This project has also been an excellent opportunity to study other important skills such as anatomy, movement and prop design.

Tongxin Fang

Personal Concept Art Portfolio

My portfolio is mainly about 2D character design and creature design for games. It also includes some illustration and environment design for 3D modelling.



David Fitzgerald

Skies of Arcadia: Remake

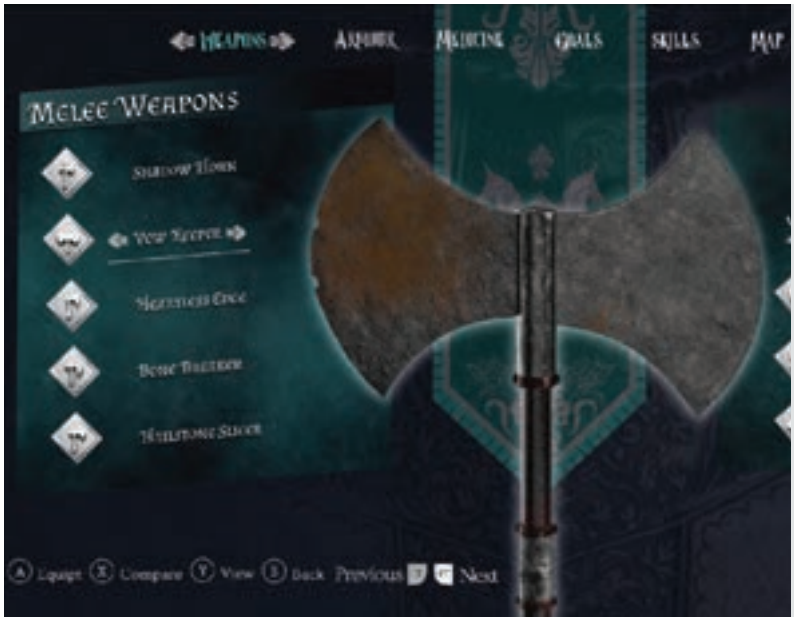
For this project I decided to revisit an old favourite of mine and apply my skills to redesigning Skies of Arcadia. I chose this project to show my fundamental skills, my 2D skills in Photoshop, and to improve my character design and storytelling. I wished to improve my knowledge of the 3D pipeline by incorporating software like Blender and ZBrush into some of my designs and workflow. I chose to focus on characters initially and as time allowed, I developed supporting environment and prop designs to round out the project and provide a more comprehensive display of how I would envision a remake of this game to look.

Sai Sreeram Gadiparthi

Concept Artist

I am showcasing a collection of my work displaying skills I developed such as drawing, art fundamentals and knowledge of design principles, in my pursuit to become a successful and employable concept artist.

This collection features a diverse range of concept art, including characters, environments and props. Each piece will offer a glimpse into the depth and richness of my creative process, from initial sketches and concept art to fully realised designs.



Grace James

Blade – Game UI and Concept Art

My project questions how I can create a strong visual identity in my portfolio of interesting character concepts and user interface design to encourage a meaningful, immersive and exciting gameplay experience. My portfolio showcases charming character design concepts. I have created user interface designs that adhere to a cohesive style guide and maintain consistency. My user interface designs ensure correct function and a visually pleasing experience.

Xueqing Jiang

Svefn

I hope I can show you a colourful world full of light and shadow, with rich, quiet and noisy embellishment.

Yuxuan Jing

Red Rain

The story begins with a disaster. Red rain falls from the sky. The boundary between reality and dream is constantly blurred. A giant covered in smoke walks on the steaming ocean. People hide in the giant's shelter, but those who are not satisfied with the status quo are still trying to resist the invasion of the red rain, looking for the survival of civilisation in the crisis.

Lina El Kharroubi

How to adapt the fantasy book Janua Vera to professional level portfolio of concept art and illustrations for a trading card game

I will be making multiple character designs and prop designs from the book *Janua Vera*, aiming for a final illustration that could be used in a trading-card game. I will be referring to multiple concept artists in the game industry to have professional results. The final illustrations will then be printed as game cards.

Paul De Leon

Atlantis Total War

This project showcases a concept art made for a hypothetical game in the *Total War* franchise, depicting the mythological lost civilisation of Atlantis. The project contains concept art of the characters, ships and architecture of this long-lost civilisation. The artwork aims to be grounded and believable, creating a culture that would fit right at home amongst the ancient Mediterranean peoples.

The process behind creating the artwork is also shown. A mixture of 2D and 3D workflows were used. Experiments included merging 3D models into 2D art with the use of hand-painted textures and digital overpainting. Also showcased are my perspective skills which are used extensively in the project's vehicles and architecture.

Rony Linson

Art Of Rony

I have created a range of character designs and environment concept art for my fantasy project. I tried to bring some fresh concept arts for my portfolio. I've also been playing with graphic design and 3D sculpting to assist my pipeline in creating concept art and illustration. Every time I make concept art, I try to make different art styles because as a concept artist I believe that an artist should have the skill to adapt to every style.

Sai Liu

Concept Art

I have worked in the industry for over seven years with experience in games, animation and TV series concept art in Shanghai. I would like to bring many years of my work experience in China to connect with industry in the UK. I have a variety of styles like cartoon, realism and some basic skills with Maya, Blender and ZBrush to help me with photobashing and overpainting on my work. It makes me a very versatility and passionate artist.

John Michaell Lorenzo

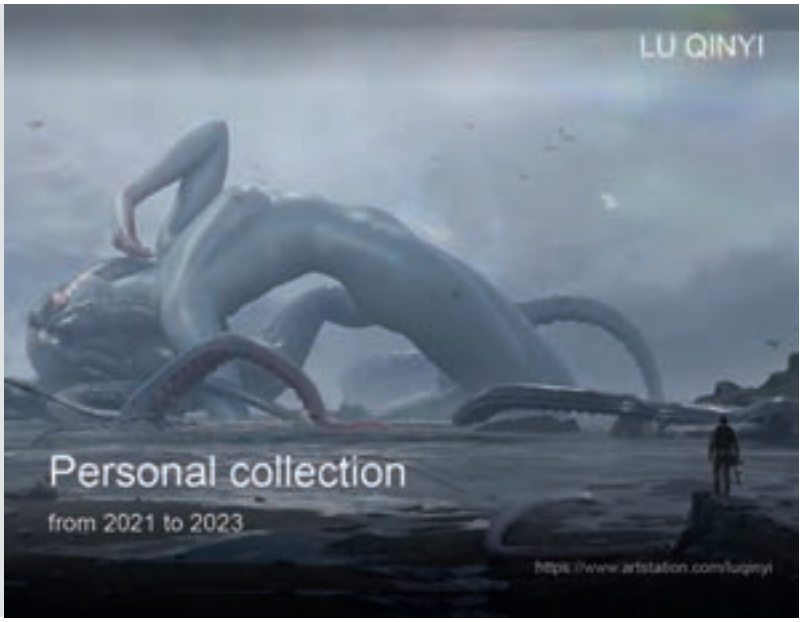
Using cyberpunk to inspire me to design characters, props, vehicles and environment

I will be exhibiting my final-year project about how I used *Cyberpunk 2077* as an inspiration to design and create characters, props, vehicles and environments. I will be showing my process on how I got my ideas and display my final design.

Qinyi Lu

Environment design collection

The poster is a collection of my explorations in environment art over the last two years. Included is a full post-apocalyptic-style personal project, assignments for different courses and even an art test for a game company. My main creative techniques include 3D modelling and photobashing. I am proficient in 3ds Max, Cinema 4D and Blender, but also use 3D software including Substance Painter, ZBrush, Daz Studio and Marvelous Designer.



Ming Ni

Beneath the Ice Surface

The works I am exhibiting are environment designs based on my own world setting. Using the photos I took during a trip to Iceland as inspiration, I decided to create a reversed world ruled by the troll below the ice surface. The troll keeps generations of gardeners in its service, who plant crystals for it in the ice and lava caves, and the troll builds their dwellings using large fish bones and solid ice.

Zhanxuan Shi

Black Goat

This is a series of concept designs of a fantasy gangster universe, inspired by classic gangster movies like *The Godfather* and *Casino*, and TV series like *Peaky Blinders*.

Yiwen Tang

Personal concept art design

This is my personal concept design portfolio, including my original stories and assignments. I mainly design characters, creatures, environments and props. I experiment with different styles in my designs to make it adaptable to different genres. The works in the portfolio were mainly created using Photoshop, Procreate, Maya and 3ds Max.

Anne Tolfrey

Postgraduate Portfolio

I am showcasing a short portfolio of my work over my postgraduate course. It displays my idea generation, creativity, high quality of work finish, and a variance from character art to creatures and environments.

Jiayi Wu

Dumuzi

This is a collection of concept art inspired by the game *Control*. Created with digital art software such as Photoshop and Blender.

Jie You You
Abyssal Realm

I created a unified world concept art through different briefs. The theme revolves around the deep sea and I used the elements of the sea in designing characters, creatures, props and visual development. This project allows me to show my ability in illustration, hard surface, creature design, clean line art and other skills.

Shuqian Zhu
Plastic Love

I'm showing a range of concepts and illustrations inspired by the future funk music genre, mostly 2D work. A lot of my work is usually fantasy, so I hope to bring some fresh cyberpunk and sci-fi concept art for my portfolio.

MA Games Design

Ashish Balagopal
The Last Door

The Last Door is a 2D thriller puzzle game. You are an unknown being trapped in a maze of rooms. Every room has a challenging puzzle – solving it will guide you to the correct door, progressing you to the next room and getting you one step closer to freedom. Choose your doors wisely and remember, the clock is ticking.

Throughout the production stage, we developed our puzzle-design skills, created mind maps and practised level pacing.

Naglis Brizgys
Bioluminescence

My project is a rogue-lite with elements of the extraction game genre.

The purpose of the project was to create various unique enemy types and behaviours using a math-based approach to facilitate game difficulty scaling through creation of interesting enemy variants.

I have also experimented with the new Unreal Engine 5 lumen feature. My goal was to light up the game only using emissive materials. The shimmering result reminded me of bioluminescence, which set the overarching theme of the project and served as a major point of inspiration in a multitude of design decisions.

Matthew Cibor
Free Vessel

Free Vessel is a first-person shooter with a focus on player movement mechanics such as wall running and sliding combined with slow motion mechanics and interesting gameplay loops.

Niall Curran
Minute Murder

Minute Murder is a first-person murder mystery game created in Unreal Engine that tasks players with solving a murder in the manor scenario. The project utilises time-travel mechanics to find clues, verify witness testimonies and ultimately attempt to solve the case.

Minute Murder demonstrates my technical engine abilities, such as gameplay mechanics, level, UI and sound design. Using a single integer value, the game can determine the visibility of key clues and scenarios which are generated through the use of data tables that carry out multiple aspects of the mystery, such as witness testimonies, body placement and victim information. This decreases the need for manual input, from a technical perspective, and allows for replayability.

This project presented an opportunity to utilise both post-process materials and unique art direction to help the game stand out visually.

Adelaide Goncalves

UI/UX Case Study: Designing for Kids

This project focused on creating a UI and UX for a 2D video game in Unreal Engine 5 based on the successful show *Bluey*, aimed at children aged 5-7 but loved by people of all ages.

This was achieved by finding research regarding video games and UI/UX aimed at kids and how they can communicate to the target audience who can't read, or are learning to, and hopefully assist them in learning how to read while having an enjoyable time doing so through video games. All while being capable of offering an enjoyable experience utilising modern design methodologies which adults are capable of appreciating.

Paul Harper

Slimeageddon

Slimeageddon is a fun, fast paced party third-person shooter game where the player and three other players will battle it out in arena-style levels collecting slime score and growing in power and size. The player who has banked the most slime score at the end of the round wins the game, earning themself some crowns to later be spent on customisation items for the player character.

Mustafa Lokhandwala

Proteckt

Proteckt is an action platformer game in which you land on a strange planet until your AI-powered ship repairs itself, but you're not alone. Defend the ship from the incoming hostile aliens with high-tech weapons and blow them into pieces.

This game was part of my final project and focuses mainly on game atomics, enemy iterations and gameplay balancing.

Yash Mande

Online Multiplayer Shooter (Master's Thesis Project)

Spacefire Squadron is my master's thesis project, in which I created an online multiplayer shooter game for four to ten players. The players fight against each other and the player with the most eliminations wins the match. The players have multiple characters to choose from, each with its own set of abilities. The objective is to shoot at another player's vehicle and destroy it to get an elimination.

The topic for my thesis is character balancing. I will be designing multiple character types with unique abilities and will be balancing their atomics accordingly.

Kelton Morgan

Fear The Weeper

Fear The Weeper is a first-person horror and puzzle-based escape room game, which has the player solve puzzles while being chased by The Weeper, which only moves when not being watched. Developed in Unreal Engine 4.

This project demonstrates my technical ability and progression in mechanics and AI. It allowed me to further build upon my knowledge of visual scripting within mechanics and puzzle design, and I expanded into sound design to create the horror atmosphere. Through heavy playtesting, the game had a focus on accessibility, for dyslexia, and z-slider for controlling the AI's speed for those with slower reaction times.

My dedication to this project allowed me to turn something I had no prior experience with into a new skill and greater understanding for the genres involved.

Jack Porthouse

Advanced Mission Design

Advanced Mission Design was first semester module where we worked as a team to make three linking missions as a first-person shooter. The theme of my group was to make terminator-themed missions where the player must steal and deliver the kill command for the AI. Making my mission, I learned more on level sequencers ranging from cutscenes to making staged interactions.

Acknowledgements

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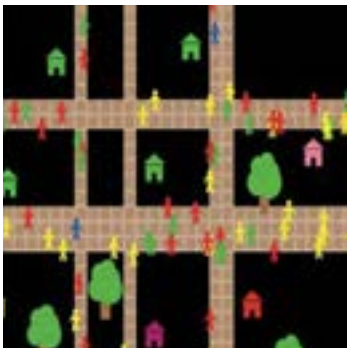

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