Dante Saxton-Knight

INTRODUCTION

I am a recent graduate from Birmingham City University with a Distinction level MSc in Video Game Programming. I have had a lifelong interest in computer games, graphic arts and music. I also have a broad interest in the sciences. Ultimately, I hope to pursue a career relevant to these interests such as developing computer games.

EDUCATION

Birmingham City University | Birmingham, UK   **(09/2022 - 09/2023)**
Master of Science in Video Game Programming (Gamer Camp) - Distinction.

My postgraduate degree involved two self-organised group projects created in Unreal Engine 4 and 5 with a team of thirteen other programming, art and design students, followed by an entirely independent solo project created in UE5. Our group projects included a story-based twin-stick shooter and a Doom-inspired arena FPS, created to satisfy a stakeholder brief presented by our lecturers. We used Git for version control and several project management tools and techniques including kanban boards, game design documents and style guides. We presented several progress reports to Rockstar Games over Zoom for their review and feedback.

For my solo project I created an atmospheric 3D platformer with a generative music system. I created level designs, character models and animations, music, sound effects, textures and a complex character movement system over the course of 9 weeks. This gave me a wealth of experience with UE5's suite of tools and took me through every step of the video game development pipeline. For this project I received an 82% Distinction grade.

University of Leeds | Leeds, UK   **(09/2018 - 07/2021)**
Bachelor of Science in Computer Science - 1st class.

My undergraduate degree covered a range of topics including programming, discrete mathematics, artificial intelligence, algorithms, computer architecture, web development, computer graphics and software engineering. I developed skills in problem solving specific to software development, both for practical problems in design and project planning, and for abstract problems in programming. I also developed my ability to work well with a team through a number of group projects undertaken with randomly assigned groups, both remotely and in-person.

For my final year project, I designed and created a computer game with a dynamic difficulty system using Python and the Pygame library featuring a novel maze generation algorithm. Through this project I developed my essay-writing and academic research skills.

Trinity Catholic School | Warwickshire, UK   **(09/2014 – 07/2018)**
A-levels: Physics (A), Maths (A), Further Maths (B).
GCSEs: Computing (A*), Biology (A*), Chemistry (A*), Physics (A*), Maths (A), Product Design (A), Religious Studies (A), Art (B), English Lit. (B), English Lang. (B).

SKILLS

• Programming experience in C++, C, Python, Java.
• Experience with Unreal Engine 5 programming and asset creation.

- Drawing, digital art and graphic design.
- Composing digital and orchestral music, playing and improvising jazz piano.
- Academic and formal writing.
- Working and organising in a group, remotely and in person.
- Communicating ideas and explaining complex concepts.
- Learning new skills and subjects quickly.
- Attention to detail in design, writing, science, and art.
- Web development/design.

EXPERIENCE

North Leamington School | Warwickshire, UK   **(2021)**

I was employed as a teaching assistant at North Leamington secondary school for one whole school year beginning in 2021, where I taught computer science, science, maths, art and music, and looked after children with special educational needs and disabilities. This gave me workplace, team working and pedagogical experience.

Pixel Toys | Warwickshire, UK   **(2017)**

While at sixth form, I undertook a week of work experience at Pixel Toys, a local independent mobile and VR game studio. I was tasked with producing graphic designs for an upcoming game, creating a 3-D game environment for a recently released game using their in-house tools, testing and reporting on VR games for debugging, and analysing existing products for ideas. This gave me experience of working with others in a workplace environment and using professional software tools.

University of Warwick, Dept. of Computer Science | Warwickshire, UK   **(2015)**

While taking my GCSEs, I undertook a week of work experience at the Computer Science department of the University of Warwick. I worked with programmable microcontrollers, robotics and 3-D printers and gained an insight into working with staff in a university technical department.

Other Projects

I play piano in a jazz quartet called Easy 3, playing in venues and bars around Warwickshire and Coventry. We recently published our first live album. In 2015 I worked on the artwork and texturing for a considerable fan project, Rayman AFG, built in Unity with a team of a dozen people from the online Rayman fan community. I have several other videogame and music projects listed on my portfolio: https://dantejsk.github.io/

INTERESTS/ACTIVITIES

I spend a lot of my free time playing the piano, composing digital music, and studying music theory. I also enjoy reading about biology, chemistry, physics and computer science, drawing fantasy pictures and technical designs, and playing and creating computer games. I have practiced martial arts including Wing Chun and Krav Maga, and have entered into several local esports video game tournaments.