

## OBJECTIVE

Keen to start my career in the exciting, fast-moving global world of software development. Looking forward to developing my skills to help further advance its use in groundbreaking applications which have a great impact in society. My goal is to lead innovative projects that enrich the lives of a diverse community.

## PROFILE

Final year Computer Science Student and an experienced programmer with a passion for games development. 10+ years of programming and 3 years of experience across multiple roles. Directed and took part in many projects professionally, academically, and for personal interest. Projects have included: software development, game development, web development, social media management, and 3D modelling. Projects used Python, Java and C#.

## EDUCATION

9/2021 – 05/2024 **BSc (Hons) Computer Science (Software Engineering) - University of Hertfordshire**  
Year1 GPA: 4.34/4.5, Year2 GPA: 4.03/4.5  
Thesis: *Development of a prototype FPS game for the comparison of aim assistance algorithms*

## WORK EXPERIENCE

6/2022 – present **Student Proctor - School of Physics Engineering & Computer Science**  
Immersed in a managed team of over 80 people assisting with tasks around campus: laser cutting and 3D printing, managing inventory, data handling, event preparations, and supervising student projects. Used Teams, Fusion360, LaserCAM, Asset Panda. Personally co-ordinated the creation of a robotics training document, which was used to train other team members to program in Python. Our initiative freed 1000+ staff hours, and was recognized with the Vice Chancellor's Award for Team of the Year.

6/2023 – 10/2023 **Game Design Intern - Games Research**  
Led the engineering of cutting-edge software solutions leveraging procedural content generation for LARP games using ChatGPT. Rather than utilising AI as another player, directed the AI to add to the story and build upon the game world, resulting in heightened immersion and an engaging gameplay experience. In prompt engineering and implemented learnings to optimise the ChatGPT prompt to below the 4096 token limit. Programmed in a Jupyter Notebook to interface with the OpenAI API, implemented version control and file sharing with GitHub, UI design with HTML and CSS, identified and made use of existing Python libraries. 100% of playtest participants responded positively, as well as providing constructive criticism to enhance the project.

6/2022 – 12/2022 **Research Assistant - Bioengineering & Instrumentation**  
Played a key role exploring the mechanical properties of a polymer for 3D printed dentistry. Demonstrating expertise in CAD using Fusion360, laser cutting, data analysis, and 3-point testing. Performed testing and data analysis on over 100 samples. Researched and re-constructed a Dean Flow spiral, to test the limitations and capabilities of moulds created by 3D printing for casting resins for microscopic technologies. Created over 15 3D models and test prints. Developed a diverse set of skills, contributed towards the delivery of top-tier research to transform dentistry around the world.

1/2022 – 9/2022 **Independent Information Technology Tutor - Bitá Consulting**  
Instructed and mentored children from years 3-6 in classes of 15-30 pupils in classroom settings and via individual and small group sessions online using Microsoft Teams. Taught data types, branching, and good software practices. Led and facilitated over 40 lessons. Cultivated a fun learning environment characterized by patience and clarity. Evidenced by the intrigue and curiosity shown by the pupils, as well as receiving 100% positive feedback from parents, left a lasting impression and shared with them a deep passion for programming.

## ACHIEVEMENTS

- 51-page thesis. Research-based with Unity implementations. Evaluating 3 aim assistance algorithms in FPS
- Self-published platformer game with 140+ page post-mortem documentation
- Live portfolio website with 35+ pages, maintained with HTML, CSS, and GitHub
- Most committed player award for basketball, invested over 200 hours training throughout the year
- Best in year raising £100's for the Prince's Trust. Collaborated to increase success and support each other

## SKILLS

- Python, Java, C#, C++, HTML, CSS
- Version control, agile, kanban, object-oriented programming, functional programming
- Full-stack development: front-end and back-end
- Fusion 360, Blender, SolidWorks, Unity