Cameron McGrath-Johnston

cam.work.alias@gmail.com
cameronmgj.github.io
linkedin.com/in/cameron-mcgrath-johnston

PROFILE

Graduate Software Engineer with a strong interest in programming, systems, and game development. Experienced in Python, C#, and Java with hands-on development through academic, research-led, and personal projects across software, testing, and games. Seeking a junior software or gameplay role to contribute in a more programming-focused capacity.

EDUCATION

BSc (Hons) Computer Science (Software Engineering) - ***University of Hertfordshire*** 09/2021 – 05/2024

Grade: 1st Class Honours, 4.0 GPA

Thesis: *Development of a prototype FPS game for the comparison of aim assistance algorithms*

WORK EXPERIENCE

Software Development Engineer in Test - ***Cognizant, London*** 05/2025 – Present

Performing functional and regression testing in regulated, production-grade environments on large-scale systems.

Rapidly onboarded to 6 projects across different teams at HMRC, learning new systems, workflows, and frameworks under strict time constraints.

Collaborating closely with developers, business analysts, and stakeholders to identify defects and improve system quality.

Extensively trained in Java, Maven, Git, JavaScript, HTML & CSS, Selenium, Postman, Cucumber, JMeter, and SQL, building strong foundations for test automation and professional software development.

Student Proctor - ***School of Physics Engineering & Computer Science, University of Hertfordshire*** 06/2022 – 06/2024

First computer science trained member of a team of select students assisting with technical support tasks, introducing the team to new ideas and opportunities.

Developed training resources for Computer Science team members, enabling the addition of 12 new hires.

Gained recognition for effective collaborative work in the Vice Chancellor's Awards 2023 as Team of the year.

Game Design Intern - ***Adaptive Systems Research Group, University of Hertfordshire*** 06/2023 – 10/2023

Led research into procedural content generation for LARP games using ChatGPT's API and Python scripting, designing and iterating on prompt-driven systems to generate structured game content.

Created a prompt that fit within the 4096 token limit whilst maximising the immersion and gameplay experience of the game world, earning positive feedback from 100% of playtesters.

Research Assistant - ***Bioengineering & Instrumentation Research Group, University of Hertfordshire*** 06/2022 – 12/2022

Explored the mechanical properties of polymers for 3D-printed dentistry, demonstrating expertise in CAD with Fusion360, laser cutting, data analysis, and 3-point testing.

Executed comprehensive testing and analysis on over 100 samples and crafted design files for more than 15 unique 3D-printed dental components, supporting innovation in dental technology.

Python Programming Tutor - ***Bita Consulting*** 01/2022 – 09/2022

Managed classroom groups of 15-30 and conducted individual and group online sessions flexibly to cater to different children's preferences and needs.

Led over 40 lessons, supporting students' confidence and problem-solving skills in an open environment.

ACHIEVEMENTS

- 51-page research-based Unity project evaluating three aim assistance algorithms in an FPS prototype, including gameplay implementation and experimental comparison
- Self-developed platformer game in Unity C#, implementing core gameplay systems and mechanics, with 140+ page post-mortem documentation
- Completed Electronic Arts (EA) Software Engineering virtual internship in C++ on Forage
- Go Herts Gold Award for initiative outside of studies

SKILLS

- Python, Java, C#, C++, HTML, CSS, JavaScript, TypeScript, React Native
- Fusion 360, Blender, SolidWorks, Unity
- Version Control (Git), OOP, Agile, Kanban, Functional Programming
- Teamwork, Communication, Adaptability, Leadership, Project Management, Research