

Christopher Buss

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EDUCATION

ROYAL HOLLOWAY, UNIVERSITY OF LONDON

1st Class Honours BSc in Computer Science (Software Engineering), with a year in industry
Grad. Nov 2022 | Egham, Surrey

LINKS

GitHub:// [christopher-buss](#)
LinkedIn:// [christopherbuss](#)
Portfolio: [rb.gy/7uan1r](#)

COURSEWORK

Algorithms and Complexity
Computing Laboratory (Games)
Human-Computer Interaction
IT Project Management
Object Oriented Programming
Small Enterprise Team Project
Software Design
Software Engineering

SKILLS

Key Skills

OOP • ECS • Design Patterns
BDD • TDD • Agile • Scrum

Languages

C++ • UE Blueprints • Lua(u)
TypeScript • Java • Python • \LaTeX

Software

Unreal Engine 5 • Perforce • Git + LFS
Roblox Studio • Helix Swarm • Trello
Azure Dev Ops • Jira • Miro

General:

Office 365 • Customer Service

ADDITIONAL

Volunteering

Helped organise and run local cubs scouting group

Charity

Spent time fundraising for different causes and groups

Music

Grade 7 equivalent in Piano

Esports

Competed in multiple University tournaments for NUEL and NSE.

REFERENCES

Available upon request.

PROFESSIONAL EXPERIENCE

AETHER INTERACTIVE | GAMEPLAY PROGRAMMER

November 2022 - January 2024 | Remote

- Programmed adaptable UI across PC, mobile, and console in **React for roblox-ts**, to create a responsive and seamless experience across all platforms.
- Created multiplayer experiences, utilising a **client-server architecture** to mitigate the risks imposed by cheaters.
- Implemented meaningful analytics using the **Luau** GameAnalytics API, empowering us to make informed decisions for future releases. Successfully managed to increase session engagement by **20%**.
- Implemented a style guide and rules using ESLint to help ensure code consistency and maintainability.

SUMO DIGITAL (AAA) | PLACEMENT GAMEPLAY PROGRAMMER

Sept 2021 - Sept 2022 | Sheffield, UK (Remote)

- Developed gameplay features encompassing core game flow, level objects, character modifications, AI, UI, and more using both an **in-house C++** engine and **Unreal Engine 5**. Aligned development with business requirements to ensure the successful realisation of project goals.
- Took responsibility to organise and plan work from the concept phase, to **blueprint** prototype, into fully working **C++** deliverables.
- Enhanced functionality by modifying the Unreal Engine 5 engine, enabling the exploration of new approaches.
- Collaborated within an **agile** team, seamlessly integrating with designers, artists, and fellow programmers. Utilised efficient communication across diverse disciplines, enabling the rapid delivery of new features.
- Peer reviewed colleague's work using **Helix Swarm** contributing to the overall improvement of our codebase quality. Simultaneously, enhanced my own technical proficiency through exposure to diverse coding styles and practices.

PROJECTS

Dissertation: Exploration of Methodologies in AAA games

- Project exploring how AAA studios could implement mainstream software methodologies, and the tooling used to facilitate.
- Understand common **software design principles** such as Flyweight, Publish/Subscribe, Observer, State, etc.
- Researching testing techniques that allow for large-scale projects to ensure bug-free releases, such as **automated testing**, and **CI/CD**.

Nucleus: A High-Performance TypeScript ECS

- Built a functional ECS, initially as part of my work at Aether Interactive, using **TypeScript** with performance in mind.
- Profiled and optimised critical paths, managing to achieve a notable **50%** improvement in benchmarks compared to the most widely adopted alternative.
- Crafted Behaviour-Driven Development (**BDD**) tests to help minimise regressions and ensure typical usage was always kept bug-free.

AWARDS

2017 Diamond

Chief Scouts Award - one of the most prestigious awards available in Scouting

2014-2017 Gold Silver Bronze

Duke of Edinburgh