

Rory Simpson

 Portfolio  roryjns123@gmail.com  linkedin.com/in/rory-simpson  github.com/roryjns

Recent AI and computer science graduate with strong foundations in software engineering and full-stack web development. Experienced in building responsive, data-driven applications using C#, with a solid grasp of object-oriented design, version control, and modern development workflows. Proven ability to deliver complex projects both independently and within collaborative teams.

Technical skills

Technologies/frameworks: .NET, React, Angular, Unity

Tools: Git, Visual Studio, VS Code

Languages: C#, Java, Javascript

Projects

Final year university project

- Designed and developed a 2D top-down shooter to explore dynamic difficulty adjustment driven by player behaviour.
- Implemented procedural level generation, adaptive enemy AI, and a custom difficulty evaluation system that modifies gameplay parameters in real time.
- Built the entire system end-to-end, focusing on modular architecture, scalability, and iterative balancing.
- Demonstrated applied AI concepts beyond coursework, combining gameplay analytics with real-time system adaptation. The project achieved a first with a grade of 76%.

Spotify web application

- Collaborated in a student team to develop a full-stack Angular web application integrating the Spotify API.
- Implemented user preferences and accessibility features, persisting data to the backend database.
- Used GitLab for version control, contributing through feature branches, merge requests, and code reviews.

Game Off 2025 jam

- Assembled and led a multidisciplinary team to deliver a complete 2D sci-fi platforming game within one month.
- Coordinated development through structured online meetings and clear communication channels.
- Guided high-level game design decisions while providing hands-on technical and design support across the project.
- Successfully delivered a polished game under a tight deadline.

University game jams

- Independently designed and developed two games during week-long game jams.
- Both projects placed 1st in their respective competitions, demonstrating rapid prototyping, creativity, and technical execution under time constraints.

Education

University of Birmingham | Birmingham, UK | September 2022 - June 2025

BSc Artificial Intelligence and Computer Science (2:1)

North Bristol Post 16 Centre | Bristol, UK | September 2020 - August 2022

A-levels in Computer Science (A), Maths (A) and History (A)

Cambridge Pre-U qualification (equivalent A)

Other experience

University of Birmingham | Birmingham, UK | May 2023 - June 2024

Publicity officer/console representative for UoB Video Games Society

- Led a rebranding initiative, creating and managing the society's Instagram account to promote events and increase student engagement.
- Organised and ran console-based tournaments, managing logistics, schedules, and on-site setup.
- Liaised with the student guild to secure equipment, including a PS5 console and games, for society use.
- Collaborated with other committee members to manage weekly in-person sessions.