

James Beech

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Computer Science graduate with a First Class Honours degree and strong experience in backend development, AI/reinforcement learning, and full-stack systems. Skilled in designing scalable software solutions, optimizing algorithms, and implementing intelligent agents. Seeking a role as Software Engineer, Backend or AI Research Engineer, Reinforcement Learning to apply technical expertise in a cutting-edge engineering environment.

PROJECTS

Finance API – ASP.NET Core, Entity Framework, JavaScript

- Built a full-stack finance demo with client/portfolio management and a dashboard featuring portfolio analytics charts.
- Designed a RESTful API to handle complex data relationships and implemented a front-end for data visualization.

Book API System - Java, Spring Boot, Swagger UI

- Built a production ready REST API for library management with CRUD operations, improving search and book management efficiency.
- Integrated Swagger UI for automated API documentation and testing, reducing onboarding time for new developers.

Reinforcement Learning AI Agents - C#, Unity

- Designed and implemented a reinforcement learning AI agent that adapted dynamically to player behavior, improving gameplay unpredictability and engagement.
- Optimized procedural generation algorithms to produce 10,000+ unique level configurations with minimal performance cost.

Hospital Management System - Java, SQL, GitLab CI/CD

- Developed a full-stack hospital management system to handle patient records, appointments and staff scheduling.
- Configured GitLab CI/CD pipelines to run automated unit tests on every push, eliminating deployment errors and reducing integration time by 40%.

EDUCATION

University of Kent

July, 2025

BSc Hons Computer Science – First Class Honours

- Graduated with First Class Honours
- Key Modules: Software Development, Blockchain Systems, Web Development, Computer Networks, Computer Systems
- Projects included Agile development, full-stack applications, IoT prototypes and blockchain smart contracts.

SKILLS

Technical Skills

- Languages: Java, Python, C#, C, Rust, SQL, JavaScript, PHP
- Frameworks and Tools: Spring Boot, REST APIs, MVC Architecture, Swagger UI, Unity, Git, GitLab CI/CD
- Development Practices: Agile, Test Automation, Procedural Generation, Reinforcement Learning AI, Embedded IoT Systems

Soft Skills

- Problem Solving, Time Management, Team Collaboration, Technical Communication

WORK EXPERIENCE

Fitness Instructor – Kent Sport

Oct

2024 – Jun 2025

- Maintained gym equipment and ensured safe usage, contributing to a positive customer experience.
- Provided tailored fitness guidance, improving member satisfaction through personalized support.
- Developed strong communication and adaptability skills working with diverse clients.