# lfie Atkinson

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#### **EDUCATION**

University of Lincoln – M.Sc. Computer Science: Predicted Distinction (86% Average)

Sept 2025

Key Modules: Software Engineering, Programming Principles, Cyber Security, Machine Learning, Computer Vision

University of Lincoln - B.Sc. Computer Science: First Class with Honours

May 2024

Key Modules: Team Software Engineering, Advanced Programming, Databases, Cloud Computing, User-Experience Design

#### EXPERIENCE

**Synx Games** Feb 2025 - Present

Software Engineer (Internship)

Lincoln, UK

- Co-led the end-to-end development of a multiplayer Roblox game from scratch, delivering a functional prototype in 8 weeks with core gameplay systems and UI built in TypeScript, React, and the Knit framework.
- Led a £500,000 Roblox Creator Fund application with pitch decks, timelines, and retention/monetisation plans.

**B-Hive Innovations** May 2024 - Sept 2024

Software & Data Technician (Internship)

Lincoln, UK

- Diagnosed and resolved 8 critical reliability issues in Python-based applications for the TuberScan Venture project, improving data accuracy by 30% and ensuring accurate data collection for training machine-learning models.
- Enhanced data collection processes by automating data processing and validation pipelines, reducing manual errors to 0 and saving 5+ hours of work weekly spent fixing errors and inconsistencies.
- Improved task workflows and Git version control in a cross-functional team, delivering 95% of sprint objectives.

#### **PROJECTS**

#### OpenGalaxy [GitHub] [Live Demo]

Jan 2025 - May 2025

Full-Stack Development (TypeScript, React, Next.js, Tailwind CSS, Django, PostgreSQL)

- Engineered a high-performance React and Next.js SPA using TypeScript, reducing runtime errors by 40% with static typing and hybrid CSR/SSR rendering, resulting in a 25% faster page load and improved SEO rankings.
- Implemented responsive UI components with TailwindCSS and DaisyUI, cutting DOM size by 80% and accelerating styling workflows, enhancing UX consistency across devices and reducing frontend maintenance time by 60%.
- · Designed backend data schema with Django and PostgreSQL fully normalised to 3NF, optimising query efficiency and ensuring data integrity for user accounts and media metadata, reducing redundant storage by 15%.
- Secured user authentication using Django REST Framework with HttpOnly JWT tokens, preventing client-side script access and mitigating XSS risks, achieving robust security for sensitive user sessions.
- Automated full-stack CI/CD pipelines integrating Vercel (frontend) and Heroku (backend), with GitHub Actions enforcing Cypress E2E tests on all PRs, decreasing deployment failures by 35% and accelerating release cycles.

#### Library Management System [GitHub]

Oct 2024 - Jan 2025

*Systems Programming (C++, JSON, Networking, Multi-threading)* 

- Engineered a library management system CLI in C++ with CRUD operations and JSON data persistence.
- Implemented 40+ unit tests using Catch2 to facilitate continuous integration and Test-Driven Development.
- Integrated multi-threading and socket-based networking, enabling concurrent user interactions and remote access.

# Sentiment Analysis Tool (B.Sc. Dissertation Project) [GitHub]

Sept 2023 - May 2024

Data Science / Machine Learning (Python, NLP, TensorFlow)

- Designed and implemented a sentiment analysis tool in Python leveraging BERT for social media analytics, delivering sentiment predictions with 86.95% accuracy, furthering to 95% with k-fold cross-validation enabled.
- Optimised data pipelines with Pandas and NumPy, improving processing speed by up to 80% on large datasets.

### SKILLS

**Programming Languages:** Python, TypeScript, JavaScript, C++

Web Development: React, Next.js, TailwindCSS, Django, Node.js, Express.js, RESTful APIs, Redux, Redis Cloud & DevOps: Docker, Kubernetes, Azure, Vercel, CI/CD, Git, Agile, SDLC, PostgreSQL, MongoDB

# Courses & Certifications

IBM - Full Stack Software Developer Professional Certificate (8/15 courses completed)

Sept 2024 – Present

Content: React, Node.js, Express.js, Django, Flask, Python, Git, Docker, Kubernetes

**IBM** – DevOps and Software Engineering Professional Certificate (10/15 courses completed)

Sept 2024 - Present

Content: DevOps, Agile, GitHub, Linux, Bash, SDLC, CI/CD, TDD/BDD, Cloud Computing