Alfie Atkinson

+44 7902 373715 | alf.atkinson13@gmail.com | <u>alfieatkinson.dev</u>

Lincoln, Lincolnshire, United Kingdom

PROFESSIONAL SUMMARY

Postgraduate Software Engineer with strong proficiency in **Python** and **C++**, alongside working knowledge of **JavaScript**, **C#**, and frameworks such as **React** and **Django**. Skilled in **Agile**, **DevOps**, and **User Experience Design**, with proven expertise in **debugging** and **collaborative problem-solving** within team environments. Proficient in **version control** tools like **Git** and experienced in developing, maintaining, and optimising software solutions. Eager to contribute to innovative projects in dynamic, fast-paced settings.

Desired Roles: Software Engineer, Full-Stack Developer, Back-End Developer, Front-End Developer

EDUCATION

• University of Lincoln

September 2024 – September 2025 (Grad. April 2026)

Master of Science in Computer Science

Lincoln, UK

- Classification: T.B.C (Expected Distinction)
- · Activities & Societies: Advanced Software Engineering, Information Systems Security, Programming Principles
- Relevant Modules: Computer Science Society

University of Lincoln

September 2021 – May 2024 (Grad. September 2024)

Bachelor of Science in Computer Science

Lincoln, UK

- Classification: First Class with Honours
- Activities & Societies: Advanced Programming, Algorithms and Complexity, Object-Oriented Programming,
 Parallel Programming, Scalable Database Systems, Team Software Engineering, User-Experience Design
- Relevant Modules: Computer Science Society, UKIEPC Participant

PROJECTS

• Library Management System

October 2024 – January 2025

Tools: C++, Multithreading, Networking, Persistence, Catch2, CMake, Doxygen

 $[\mathbf{C}]$

- **Developed a console-based library management system** in C++ with CRUD operations for books, users, and transactions, leveraging Object-Oriented Programming principles.
- **Implemented multithreading capabilities** to support concurrent user operations, optimising system performance under load.
- **Designed and integrated networking capabilities** to allow remote interactions, laying the groundwork for distributed library management.
- Incorporated data persistence mechanisms to enable reliable storage and retrieval of library data across sessions.
- **Built a modular directory structure** with clear separation of concerns, using CMake for build automation and Doxygen for automated documentation generation.
- **Adopted Test-Driven Development (TDD)** with Catch2 to ensure robust and reliable code through comprehensive unit testing.

• Dissertation Project: Sentiment Analysis Tool

September 2023 – *May* 2024

Tools: Python, TensorFlow, Keras, PyQt6, Machine Learning

- **Implemented and fine-tuned deep learning models** for sentiment classification, utilising TensorFlow and Keras to achieve high accuracy and robustness in detecting sentiment from diverse textual data.
- **Optimised data pipelines** to handle and pre-process large volumes of social media data efficiently, enabling real-time sentiment analysis and reducing processing time by 30%.
- **Designed and deployed an interactive GUI using PyQt6**, allowing users to easily visualise sentiment trends, track brand sentiment over time, and customise search terms and settings for tailored insights.
- **Conducted comprehensive testing and validation** to ensure the accuracy and reliability of the sentiment analysis tool, including cross-validation of models and user feedback sessions.

SKILLS

- Languages & Frameworks: Python, JavaScript, C++, C#, HTML/CSS, Django, React, Node.js
- Data Science & Machine Learning: MySQL, NumPy, pandas, scikit-learn, TensorFlow, Keras
- Cloud Technologies: AWS, Azure, Google Cloud Platform
- DevOps & Version Control: Git, BitBucket, Docker, CI/CD, Kubernetes, SDLC
- Project Management Methodologies: Agile Development, Scrum, Kanban
- Other Tools & Technologies: Unix/Linux, LaTeX, VS Code, Jira, Unreal Engine 5, Microsoft 365, Adobe Suite
- Other Skills: Algorithms, Object-Oriented Programming, Test-Driven Development, User-Experience Design

EXPERIENCE

• B-Hive Innovations [�]

Field Trials Technician (Temporary)

May 2024 – *September* 2024

Lincoln, UK

- Developed and debugged software applications for the TuberScan Venture project, improving user-experience, system reliability, and data accuracy in field trials by troubleshooting issues as they arose in a fast-paced environment.
- Assisted in research and development activities, contributing to the exploration of innovative solutions for agricultural technology.
- Leveraged agile development, scrum, and Jira to manage tasks and track progress, ensuring efficient collaboration and delivery within the team.
- Implemented version control using BitBucket, facilitating smooth CI/CD of software tools in the TuberScan Venture.

• Dollar Jeans [�]

E-Commerce Technician

January 2023 – March 2024

Lincoln, UK

- **Maintained and updated the company website**, ensuring that the latest products and promotions were accurately displayed to customers.
- **Managed an SQL database of 15,000+ products** and synced across platforms like eBay, Amazon, and Shopify using Veeqo.

CERTIFICATIONS

• IBM: Full Stack Software Developer Professional Certificate

Proj. September 2025

• IBM: DevOps and Software Engineering Professional Certificate

Proj. March 2025

• Atlassian University: Jira Fundamentals Badge

June 2024

AWARDS

• University of Lincoln: The Lincoln Award

Proj. May 2025

VOLUNTEER POSITIONS

• Oxfam [October 2024 – Present

Online Sales Assistant Lincoln, UK

- **Researched products and analysed pricing** of items for sale on the Oxfam Online Shop.
- Listed and managed products on the Oxfam Online Shop, accurately describing and pricing items.

• The Tab [October 2024 – Present

Author Lincoln, UK

• Researched stories and wrote articles for The Tab Lincoln, covering many topics from local news to student life.

ADDITIONAL INFORMATION

- Interests: Video Games, Tabletop Games, Reading, Drawing and Digital Art, PC Building
- Misc: Willing to relocate, Open to remote work, Open to travel

REFERENCES

1. Matteo Bermond

Engineering Project Manager B-Hive Innovations

Email: Available upon request

Relationship: Line Manager at B-Hive Innovations

2. Ben Murphy

Head of Product Development BGB

Email: Available upon request

Relationship: Line Manager at B-Hive Innovations