

Portfolio: <https://addison-ko.vercel.app/>

PROFILE SUMMARY

Software Developer with 500+ hours of intensive hands-on training and experience building enterprise-grade applications. Proficient in Java and Spring Boot, complemented by solid working knowledge of Python and SQL. Passionate about leveraging AI tools such as Cursor AI and prompt engineering to accelerate development. Former market research professional with strong commercial awareness, data logic expertise, and proven ability to own complex projects end-to-end.

SKILLS SUMMARY

- **Languages:** Java, Python, SQL, JavaScript, HTML5, CSS3
- **Frameworks:** Spring Boot, Spring Data JPA, Spring MVC, Hibernate, JUnit, Mockito
- **Tools & Platforms:** Cursor AI, Docker, AWS, Git/GitHub, Maven, Redis, MySQL, PostgreSQL, Postman
- **Others:** RESTful APIs, Microservices, OOP, MVC Architecture, SDLC, Agile/Scrum

SOFTWARE DEVELOPMENT PROJECTS

Stock Heatmap Dashboard | <https://stock-heatmap-ak.vercel.app>

Tech stack: Java, Spring Boot, Python | PostgreSQL, Redis | HTML5, CSS (FlexBox/Grid), JavaScript, D3.js, Lightweight Charts

Infrastructure: Railway, Supabase, Upstash, Vercel

- Engineered a responsive financial data dashboard, capable of dynamically rendering real-time performance data and historical analytics for the entire S&P 500 index.
- Developed a robust Java Spring Boot backend featuring managed rate-limiting algorithms to safely source data from external APIs (Finnhub, Yahoo Finance) without triggering 429 errors.
- Improved system speed by implementing multi-threading with Spring Async; programmed the backend to save live stock updates to a Redis cache instantly while handling permanent database storage in the background.
- Designed and implemented interactive frontend visualizations, including a treemap grid and live-updating candlestick chart using D3.js, Lightweight Charts, HTML5, CSS, and JavaScript.

Canteen Ordering System | <https://canteen-system-ak.vercel.app>

Tech stack: Java, Spring Boot (JPA, Security, REST) | PostgreSQL | HTML5/CSS/JavaScript, Stripe API

Infrastructure: Railway, Supabase, Vercel

- Collaboratively built an end-to-end school canteen ordering platform with separate customer, kitchen, and admin portals – covering customer ordering, kitchen fulfillment and admin analytics.
- Designed core business logic for user payment options, including digital wallet top-ups via Stripe integration, in-app balances, and automated end-of-day transaction logging.
- Secured application access using Spring Security, implementing BCrypt password hashing, secure payment workflows, and role-based routing for customers, admins and kitchen staff.
- Utilized Github for team workflow management, implementing Git branching strategies (feature branches, pull requests, and code reviews) to ensure clean code integration.

PROFESSIONAL EXPERIENCE

Career Transition - Software Development Trainee • Venturenix Lab, Hong Kong

Apr 2026 – Jul 2026

- Programming Languages: Java, Python
- Backend: Spring Boot, Spring Data JPA, Spring Security, Redis, Microservices
- Frontend: HTML5, CSS3, JavaScript
- Cloud: AWS (EC2, S3, ELB), Railway, Supabase, Upstash, Vercel

Senior Research Executive • Opinium Research, London UK

Aug 2025 – Mar 2026

- Served as a core member of the technical training team, onboarded 20+ new joiners on complex survey scripting platforms, logic configuration, and data processing architectures.
- Maintained end-to-end technical and project ownership over an aggregate account portfolio valued at £100k+ annually, consistently delivering multiple concurrent project lifecycles on schedule.
- Established strong client relationships as the primary contact on a few accounts, successfully resolving complex project queries and uncovering new business opportunities.
- Mentored junior team members on best practices, problem-solving, and improving delivery efficiency.

Research Executive • Opinium Research, London UK

Nov 2023 – Jul 2025

- Recognized as one of the 'go-to' people for survey scripting and data processing queries; troubleshooted complex logical blocks and optimized technical platform usage for the internal team.
- Effectively managed international programming team located in Cape Town, successfully mitigating time-zone constraints to ensure seamless project development.

Junior Research Executive • DJS Research, Manchester UK

Jan 2022 – Oct 2023

- Mastered the understanding of the full project lifecycle, taking proactive ownership of core component modules for small-to-medium projects.
- Engaged in continuous professional development and rapid technical training to accelerate industry knowledge and best practices.

EDUCATION

Venturenix Lab

Hong Kong

Full-Time Software Engineering Bootcamp

Apr 2026 – Jul 2026

- Completed a 14-week immersive full-stack development program with 500+ hours of hands-on coding, system design, and cloud deployment (AWS, Docker, Railway), focusing on enterprise-grade application development.

Lancaster University

Lancaster, UK

Master of Science: Advanced Marketing Management (2:1)

2020 - 2021

Lancaster University

Lancaster, UK

Bachelor of Science: Marketing

2017 - 2020

Availability: Immediate