idan Pick

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in Aidan Pick

Education

Imperial College London

Oct 2023 - Jul 2027

MEng Computing - (Integrated Master's)

- Predicted First Class Honours (Overall Grade: 80.51%)
- Relevant Coursework: Algorithms, Software Engineering Design, Operating Systems, Compilers, Networks, Databases

Technical Skills

Languages: Python, Java, C, Scala, Kotlin, Typescript/Javascript, SQL, Haskell, Bash

Technologies: React Native, Spring Boot, PostgreSQL, Git, CI/CD, Kafka, Supabase, Gradle, Maven, Linux

Developer Tools: GDB, QEMU, Expo, Trello, Arduino IDE, Neovim, Tmux

Work Experience

Konnexsion - Software Engineering Intern

Sep 2025 - Oct 2025

- Built a data migration tool for DynamoDB in Python migrating data from development to production environments
- Designed rule-based filtering system to selectively migrate bots and modules while dropping transient data
- Implemented a fail-safe dry-run mode to prevent accidental data writes and log migration impact before execution
- Automated 3-step migration workflow into a single inline command, reducing manual data migration time by hours

Projects

Decision Tree Classifier for WiFi Localization | Python, NumPy, Matplotlib, Machine Learning

Oct 2024 - Nov 2024

- Implemented a decision tree classifier from scratch using entropy-based information gain for WiFi signal localization
- Optimised split computation with prefix sum arrays, reducing complexity and runtime for large feature spaces
- Built a **custom tree visualisation tool** with **proportional leaf spacing** and colour-coded classifications for analysis
- Designed a k-fold cross-validation system to evaluate model performance, computing precision, recall, and F1 scores

SEVA | TypeScript, JavaScript, Supabase, PostgreSQL, React Native, CI/CD, Gitlab Pages, Expo

- Built a cross-platform mobile app in a team to connect volunteers with charities using React Native and Supabase
- Automated deployment using GitLab CI/CD, building APK releases with Gradle and hosting them on GitLab Pages
- Conducted interviews with charity coordinators and volunteers, narrowing down on pain points to improve UX
- Delivered a live demo and UX walkthrough to industry aligned judges, achieving 88% for engineering depth and clarity

WACC Compiler | CI/CD, Scala, x86-64 Assembly, Parsley (Parser-combinator library)

- Architected a fully functional compiler for a C-like language (WACC) in Scala from scratch in a team of four
- Developed a modular frontend using Parsley for syntax analysis and top-down type checking for semantic validation
- Engineered backend to translate Typed AST to x86-64, managing stack memory, registers and runtime error handling
- Improved efficiency by introducing constant folding, constant propagation, and control flow optimisations

Certifications & Leadership

JPMorgan Software Engineering Job Simulation on Forage

Aug 2025

- Developed a Spring Boot microservice to handle financial data streams, processing events with Kafka and integrating external **REST APIs**
- Exposed custom REST endpoints for data retrieval and implemented data persistence using Java Persistence API (JPA) with a H2 in-memory database

Imperial College Jailbreak Winner

Jun 2024

· Co-led a team to victory in a university-wide competition, traveling the furthest distance from campus in 36 hours with no money, demonstrating resourcefulness and strategic planning

InvestIN Education - Engineering summer Experience

Aug 2022

 Secured 1st place in a team-based engineering contest for designing and building the most innovative and costeffective obstacle-avoiding robot

Extracurricular

- Jazz drummer; performances include Royal Albert Hall for Camden Youth Jazz Orchestra and Imperial Big Band
- Awarded music scholarship

- Ranked 3rd in U19 Butterfly National School Team Table Tennis Championship
- Imperial College 2nd Team Squash