Anthony Catterwell

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About me

Professional interests	Cloud architectures, distributed systems, machine learning, data mining, web-development.
Legal status	British and Thai dual citizen.

Education

The University of Edinburgh	Edinburgh, UK
BSc. (Hons), Computer Science and Mathematics, 1:1 (expected)	2016 — 2020 (expected)

Year 1	Year 2	Year 3	Year 4
84% average	82% average	79% average	ongoing

Bangkok Patana School	Bangkok, Thailand
IB Diploma (38/45)	2014 — 2016

Employment

Software Development Engineering Intern	Jun 2019 — Sep 2019
Amazon Europe Core Sàrl	Luxembourg City, Luxembourg

- Implemented, tested, and deployed component of high-throughput, high-availability data-retrieval service to enable the fetching of data from additional sources in AWS.
- Designed, implemented, tested, and deployed front-end web UI and associated back-end REST service to enable self-service bulk data submission by internal customers.
- Created metrics and dashboards for measuring and monitoring performance and data quality.

Selected projects

- **C Compiler**: Built a compiler for a subset of C to MIPS-Assembly. (Java, MIPS.)

- **Predictive classifier of exam performance**: Designed and developed a performant machine-learning model to predict performance of students in an online exam given logged data recorded earlier in the same exam. This constitutes a leading submission to the NAEP Data Mining Competition 2019. (Python, Pandas, Scikit-learn, XGBoost.)

- **Android App *Coinz***: Designed and implemented location-based coin collection-game. (Java, Android, Firebase, Mapbox, Material-UI.)

- **Select components of a DBMS**: Implemented B-tree record manager, and heap file of a simple database management system. (C++, Minibase.)

Technologies

Java, Python, Linux, Git, SQL, Guice, Mockito, AWS (S3), Vim, LaTeX	***
PyTorch, C++, MapReduce (Hadoop), TypeScript, Angular, Unix shell scripts, Pandas, Scikit-learn, REST, Firebase, Mapbox, Android, Maple, AWS (DynamoDB, Lambda)	**
Hibernate, Spring, Haskell, MIPS assembly, LLVM, MATLAB, R, AWS (Data Pipeline, Redshift, RDS)	*

***	Extensive use in multiple major projects.
**	Substantial use in at least one major project.
*	Good familiarity through use in at least one smaller project or minor use in a major project.