Kelvin Zhang

me@iamkelv.in · +44 7876 562978 · 54 Mullards Close, Mitcham, Surrey, CR4 4FD

iamkelv.in · github.com/kz

Education

Imperial College London   London, UK
MEng Computing   2017 - 2021
- First year: 74.6% overall (1st class), 93% programming (C, Haskell, Java)
- Awarded Haskell prize for highest attainment in final Haskell test

Whitgift School   London, UK
Secondary School   2009 - 2017
- 4 A*s at A Level in Computer Science, Maths, Further Maths and Physics
- 10 A*s and 1A at GCSE; A in FSMQ (Additional Maths)

Work Experience

Bloomberg   London, UK
Software Engineering Intern, Data Technologies   Jul 2018 - Sep 2018
- Worked on PowerfulSeal, an open source chaos engineering tool used to test the resilience of Kubernetes clusters behind an internal microservices platform
- Implemented metric collection (Prometheus) and developed an internal dashboard (Grafana) to improve visibility of faults introduced by PowerfulSeal
- Built a web interface (Vue.js/Flask) and implemented distinct methods to configure PowerfulSeal, improving ease of configuration and monitoring

Artificial Labs   London, UK
Software Development Intern   Jul 2017 - Sep 2017
- Implemented a role-based permissions system for an insurance policy management platform
- Refactored common components (audit logging, document generation, authentication) used across multiple products into individual packages, improving test coverage and maintanability
- Implemented parsing and synchronization of live, unsorted sports player data (XML) from a legacy data source into a PostgreSQL database, focusing on the integrity and quality of data

Projects

swanntools *https://github.com/kz/swanntools*
Reverse engineered and built capture tools for the Swann DVR4-1200 (a CCTV digital video recorder). Involved finding vulnerabilities by inspecting network packets, writing detection scripts and building a software abstraction layer (using Go) to replace the DVR's client interface. Kept a research journal.

Timetable Pusher *https://github.com/kz/timetable-pusher-pebble*
An Pebble smartwatch app allowing users to sync their school class schedules with their Timeline (a calendar). Consists of a Pebble (C SDK) app and PHP/Laravel API. 2000 users at peak.

Poniverse.net *https://poniverse.net/*
Volunteer for online network of websites (Jul 14 - Sep 16). Built a file caching system for an open source music hosting site (Pony.fm), encoding less popular audio formats depending on demand, saving hundreds of gigabytes; built an audit trail for an OAuth 2.0 provider.

Skills & Interests

Languages/Frameworks – Proficient in PHP (inc. Laravel); comfortable with Go, Java (inc. Android SDK), Python (inc. Flask), JavaScript (inc. Vue.js), SQL; previously used C, Haskell.

Technologies – Experienced with Git; comfortable with Unix/Linux, continuous integration (TravisCI); exposed to Kubernetes, Docker, Google Cloud Platform, AWS (EC2, S3), Webpack.

Extracurricular – Secretary '18/19, Imperial College Department of Computing Society; Department of Computing Year One Academic Representative; fives (ball game) player.

Achievements

IET Diamond Jubilee Scholar – Awarded grant for for achievements in software engineering Oct 2017

European Cyber Security Challenge Competitor – Competed on the UK team against other European countries in attack/defence scenarios and capture the flag challenges   June 2016

Cambridge Bio-Hackathon (1st Place) – Won first place prize for building a synthetic biology web application providing an intuitive interface to interact with cloud laboratories   Mar 2016