Kelvin Zhang

MEng Computing at Imperial College London

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

iamkelv.in
github.com/kz
linkedin.com/in/kelvzhan

PROFILE

I am an aspiring software engineer with a strong work ethic. I started programming from a young age due to a natural curiosity of computers, which developed into a love for the satisfaction gained from building software. I especially enjoy working on difficult challenges such as computer vision and building scalable systems, where creative thinking and teamwork can solve impactful problems.

EDUCATION

Imperial College London

MEng Computing (Artificial Intelligence)
2017 - 2021

Whitgift School, Croydon

Secondary School
SEPTEMBER 09 - JULY 17

- A*A*A*A* at A Level in Computer Science, Maths, Further Maths and Physics
- 10 A*s and 1 A at GCSE; A in FSMQ (Additional Maths)
- Awarded the Arkwright Engineering Scholarship in September 2015, a highly selective scholarship which identifies and nurtures future leaders in engineering.
- Ran a student-led society, CyberSoc, educating students in cybersecurity and programming. Responsible for running lunchtime sessions, mentoring students and liaising with speakers.
- Recipient of the "OWA" graduation award for computing-related activities during my Sixth Form career which brought distinction to the school.

WORK EXPERIENCE

Artificial Labs, London — (*https://artificial.io/*)

Software Developer (Intern)
JULY 17 - OCTOBER 17 // JUNE 15 - AUGUST 15

Artificial Labs is a London-based company building tools for insurers which allow them to operate faster, more efficiently and more accurately.

- upgraded and implemented new features for PHP/Laravel applications using test-driven development
- built core, reusable packages (including authentication, audit logging, document generation) to be used in ArtificialOS, a service-based cloud suite for insurers
- implemented functionality to parse and synchronise large amounts of unsorted live sports player data for AggregateX, allowing brokers to automatically keep track of their insured players
- maintained and implemented new features for PolicyX, a policy management system, including building a role-based system for brokers to submit procedure modifications to underwriters for review

Poniverse — (*https://poniverse.net/*)

Web Developer (Volunteer)
JULY 14 - SEPTEMBER 16

Poniverse is an online super-community which runs a network of websites.

- built an audit trail for the OAuth 2.0 provider responsible for authenticating users across the network
- implemented a file caching system for an open source music hosting site, Pony.fm (https://pony.fm/), in order to save hundreds of gigabytes of disk space by caching music formats which are often downloaded and encoding others on demand
- implemented a versioning system for Pony.fm to allow artists to upload new versions of their tracks and revert to older versions

NOTABLE PROJECTS

swanntools - *January 2017 - (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 - *October 2015 - (https://github.com/kz/timetable-pusher-pebble)*

An Pebble smartwatch app which 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 and counting.

TECHNICAL EXPERTISE

	Experienced with	Comfortable with	Exposed to
Languages	PHP (inc. Laravel); HTML + CSS (inc. Sass); JavaScript	Go; Java (inc. Android SDK); Python; JavaScript; Ionic (Angular 2)	AngularJS; React; Django; Flask; C; C++; Haskell
Software and Tools	Git; JetBrains IDEs; Vagrant; CodeShip; Bugsnag; Slack; MySQL; PHPUnit (TDD)	Travis CI; Linux CLI (Ubuntu/Debian)	Docker; AWS (EC2, S3); Gulp; New Relic

ACHIEVEMENTS AND SCHOLARSHIPS

European Cyber Security Challenge Competitor - *November 2016*

Cyber security competition involving attack/defence scenarios and capture the flag challenges. Chosen to be part of the UK's team after competing in national rounds held by Cyber Security Challenge UK. Worked with web application vulnerabilities and cryptography challenges.

Cambridge Bio-Hackathon (1st Place) - *June 2016*

Winning the first place prize at the Cambridge Bio-Hackathon, a five day hackathon with a synthetic biology focus, our team of six built a platform which makes cloud labs more accessible through an intuitive interface and integration with cloud laboratories.

Corpus Computer Science Essay Prize (Runner-up) - *March 2016*

Runner-up in the 2016 Corpus (Cambridge) Computer Science essay prize for an essay on the possibilities of using formal logic to store legislation.

Leangap Class of 2015 - *Summer 2015*

Selective summer entrepreneurship programme for aspiring tech entrepreneurs. Built the minimum viable product of a startup company in six weeks.

ACTIVITIES AND INTERESTS

- As a regular hackathon attendee, I have led teams with zero/little programming experience to attain prizes and have used hackathons to improve my project management skills and discover new technologies. I have also volunteered at hackathons such as HackGenY London.
- I hold an interest in cybersecurity, where I enjoy listening to talks and participating in bug bounties.
- I keep a blog (https://iamkelv.in/blog/) where I post tutorials and write-ups of my projects.
- Outside of computing, I play fives, a sport similar to squash but played with hands instead of racquets.

REFERENCES

Mr Johnny Bridges (Director)
Artificial Labs
2 White Lion Court
Cornhill
London
EC3V 3NP
johnny@artificial.io
0203 751 6074

Mr Robert Flook (Head of Computing)
Whitgift School
Haling Park
South Croydon
CR2 6YT
rmf@whitgift.co.uk
020 8688 9222