

GEORGE SOTERIOU

george@soteriou.me · georgesoteriou.com

WORK EXPERIENCE

Google - YouTube
Software Engineer

Zurich, Switzerland
October 2021 - Present

Google - Android Enterprise
Software Engineering Intern

London, UK
April 2020 - October 2020

Worked with Android Enterprise on a project to decrease the time it would take for an enterprise device to receive an application update, from the usual 48h window, to immediately after the update is published to the Play Store. At the scale of android, potentially millions of devices might need to be notified for a single app update and this fanout was a huge challenge to handle. This was implemented using spanner queues following similar architecture to the Firebase messaging project. After researching and designing how this would be implemented by comparing different approaches, I wrote the design doc for this project. After getting the design doc approved and implementing the code we launched it incrementally. It is now in production and available to customers. During my time at Google I also attended a lot of learning courses including ones about cloud ML, Search and Google's Knowledge Graph.

Cisco Systems
Platform Engineer, Technology Intern

London, UK
June 2019 - September 2019

Worked on a personal project to automatically provision Cisco specification kubernetes clusters within AWS and GCP as an alternative to the in-house clusters they use for the WebEx Teams platform. Used Terraform to create infrastructure and Ansible to provision the cluster. The cluster architecture involved bastion hosts and separate internal and external subnets. Pod routing was achieved using custom gateway nodes with code to register and keep track of a mapping from pod subnets to nodes, with Cilium networking. Also worked with *Go* and *Docker* to create a Mutating Admission Webhook for Kubernetes. Today a large part of the Webex Teams infrastructure runs on these clusters.

Goldman Sachs
Technology Intern

London, UK
April 2019 - June 2019

Shadowed full time engineers and learned a lot about how the company operates. After research, with a team of 4 we presented our work for ways they could improve the current platform used for Big Data Storage within Goldman. We were nominated for best team.

Cypriot National Guard
Corporal, Compulsory Military Service

Cyprus
July 2016 - September 2017

Trained in discipline and combat as artillery soldier. Then transferred to Network Manager position. Was responsible for my regiments network security services. Passed the Corporal exam and was given responsibility for 5 recruits.

Think Learning Centre (family business)
Web Developer

Nicosia, Cyprus
2014 - 2016

Developed and maintained an online presence for the company. Setup local file-server and company specific Email accounts to increase collaboration.

EDUCATION

Imperial College London MEng Computing Artificial Intelligence
Upper Second Class Honours (68.36%)

London, UK
2017 - 2021

Thesis: Neural Super Resolution Assisted by Depth Estimation (Supervisor: Amir Alansary) (75.00%)

Post-nominal awards: Associateship of the City and Guilds of London Institute

Prizes and distinctions: Entrepreneurship (Pass with Distinction)

English School Nicosia Secondary School

Nicosia, Cyprus
2010 - 2016

A-Levels: Maths, Computing, Further Maths, Physics and Greek with A* A* A A A

Imperial College London Department of Computing Society (DoCSoc)

London, UK

Webmaster

2018 - 2020

For two years working as part of a committee responsible for 1300 students, forming one of Imperial College's largest and most active societies. My responsibilities included updating and maintaining docsoc.co.uk as well as helping the rest of the team running the society. We organized many events such as Google Devfest & ICHack 18/19/20.

Portal Projects: During my tenure I created three new PWA/TWA portals:

Firebase, Vue, MLKit, Cloud Messaging and Kerberos for auth

- portal.docsoc.co.uk helps our sponsors find students interested in positions they offer.
- my.docsoc.co.uk facilitates the event ticketing system and realtime attendance tracking for society events.
- hub.ichack.org used during IC Hack to manage renting of hardware and providing useful information to hackers.

Imperial Google Hashcode Hub

London, UK

Organizer

2018 - 2020

Organized the Google Hashcode Hub for Imperial over 2 years with more than 200 people joining our hub.

Hack{Cyprus} Hackathon & Code School

Nicosia, Cyprus

Organizer

2013 - 2015

Part of organizing team for first ever hackathon in Cyprus. My responsibilities included finding sponsors before the event, organizing and judging teams on the day.

Run monthly sessions in which my responsibilities included teaching students the basics of programming through 'hour-of-code' and robot programming with blocks to complete challenges.

English School Nicosia Technology Society

Nicosia, Cyprus

President

2015 - 2016

Weekly sessions in which I would teach students about simple programming algorithms and how to make their own personal websites.

English School Nicosia Amateur Radio Society - 5B5ES

Nicosia, Cyprus

President (Licenced Amateur Radio user since 2013 - 5B4AJZ & M0GCQ)

2012 - 2016

Weekly sessions in which I would teach students about Amateur Radio and how it helped shape technology today while helping them prepare for the Amateur Radio license exam. In 2012 I won first in Europe in CQWW (the largest yearly competition).

PROJECTS**Robot car SLAM***Python*

Programmed a robot using Simultaneous Localisation and Mapping to help it reach targets in an unknown room while mapping the area it is in only using one radar sensor in the fastest possible time.

xDrone*NodeJS, Express, Python, Vue, Three.js*

In a team of five we created a platform for teaching primary school students how to code. We introduced real life drones that execute code in real time after approved by the teacher. Used docker for easy deployment to a raspberry PI. Project includes web interfaces for both students and teacher, as well as a translator from a Domain Specific language to control the drones. We also implemented a 3d emulator in Three.js of the drones flying.

Prolog logic model based problem solving*Prolog*

Created a logical model world that could solve any general problem (within the model domain) given a specific starting point and a knowledge base if there is a solution.

WACC Compiler*Kotlin, Java*

Part of a team of four in which we created a compiler for a newly created language written in in Kotlin. We implemented Lexical Analysis, Syntax Analysis, Semantic Analysis and Code Optimization. We used techniques like peephole optimizations and Loop optimizations.

PINTOS Operating System*C, 80x86, Linux Kernel*

As Project leader in a team of four, I worked on an 80x86 architecture operating system. We worked on the kernel threads to include priorities, safe concurrency using locking algorithms and priority donation when resources are locked. We also implemented dynamically loading and running multiple user programs concurrently, along with Virtual Memory management and concurrently safe memory eviction and swapping.