

# EUGENE LIN

☎ +44 7577 490072

✉ me@eugenel.in

🐙 github.com/lin-e

🌐 eugenel.in

🌐 linkedin.com/in/line

## EDUCATION

2018 - 2022	<b>Imperial College London</b> • Year 2: 85.4% overall (Dean's List), with first-class honours in all modules and 93% in lab projects • Year 1: 81% overall (Dean's List), with first-class honours in all modules and 85% in programming	MEng Computing
2011 - 2018	<b>Dunraven School</b> • A Level: A*A*A*A in Maths, Further Maths, Computer Science, and Physics	

## WORK EXPERIENCE

Oct 2020 - Present	<b>Undergraduate Teaching Assistant</b> • Worked as a laboratory assistant to aid first-year undergraduates in weekly assignments • Provided me with valuable experience on understanding and debugging code written by others	Haskell, Kotlin, Java
Jun 2020 - Oct 2020	<b>Netcraft</b> • Assisted in improving and automating client-facing fraud detection services written in <b>Perl</b> • Identified patterns in historic datasets to detect resurfacing phishing attacks • Deployed automated detection of money laundering recruitment across social media sites • Optimised performance of internal pages by identifying expensive and redundant processing	Perl, PHP, JavaScript
Jul 2019 - Aug 2019	<b>Fire Tech Camp</b> • Worked as a Senior <b>C#/Java/Python</b> instructor, for groups of children aged 12 and up • Received consistent positive feedback for my hands-on teaching style	C#, Java, Python

## PROJECTS

2020	<b>Materialize</b> • Utilised a research paper for background removal on a live webcam feed with <b>OpenCV</b> • Assisted with implementation of <b>RESTful API</b> with <b>Pistache</b> for control through an <b>Electron</b> UI • Implemented benchmarking suite for quantifying performance and quality metrics	C++, Kotlin, TypeScript
2020	<b>EventKiwi</b> • Cross-platform application, built with the <b>PERN</b> stack and deployed on <b>Heroku</b> , for tracking events • Started at <b>Hack-a-project</b> and iteratively designed with regular feedback from users and the RCA • Integrated with <b>Azure</b> for user authentication and <b>AWS S3</b> for static resource hosting	TypeScript
2020	<b>Optimising Compiler</b> • Full WACC compiler including parsing, semantic analysis, code generation, and optimisation in SSA • Implemented a continuous integration pipeline with <b>Docker</b> and <b>Kubernetes</b> to automate testing • Extended the language to support OOP, libraries, type inference, and metaprogramming	Scala, ARM
2019	<b>A Pigment of Your Imagination</b> • Finalist for <b>OxfordHack 2019</b> for the visuals and design category with a colouring book generator • Implemented edge detection algorithms by clustering with $k$ -means and performing noise reduction • Assisted in integration of image processing in Kotlin with final <b>Android</b> application in Java	Java, Kotlin
2018	<b>Untitled Game</b> • Generated terrain with basic MST algorithms, and generated trees with a custom mesh builder • Enemies in the game gradually improved with the use of a genetic algorithm • Web interface for scores, as well as a custom library for low-latency IoT lighting over a LAN	C#, PHP, JavaScript, Python
2016 - 2017	<b>Skype4Sharp</b> • Only public .NET library for interacting with modern Skype chats (at the time) • Used in a publicly available Skype bot, with a reach of over 5,000 users at its peak • Designed an open-sourced Skype bot, featuring a plugin manager, and a permissions system	C#

## SKILLS & INTERESTS

Programming	Comfortable with <b>Scala</b> , <b>Kotlin</b> , <b>C#</b> (including <b>Unity</b> ), <b>PHP</b> , <b>Python</b> , <b>TypeScript</b> , and <b>Java</b> . Also have various amounts of experience in other programming languages, including <b>Haskell</b> , <b>Perl</b> , <b>C</b> , <b>C++</b> , and <b>JavaScript</b> . My public projects are available on GitHub. Also comfortable with markup languages such as LaTeX.
Linux	Proficient in using the Linux command line - including managing headless servers and networks. Experience working with <b>LAMP</b> stack. Able to use standard programming utilities such as version control, <b>CI/CD</b> , and containerisation. Comfortable with automating (and scripting) repetitive tasks.
Prototyping & Design	Explored different parts of prototyping, such as designing my own PCBs. Completed an additional course in prototyping at Imperial College London, which aided in developing my skills with electronics, as well as teaching me the basics of <b>CAD</b> .
Hackathons	Participated in multiple hackathons; <b>IC Hack 19</b> , <b>OxfordHack 19</b> , and <b>Facebook Hack-a-project</b> . Also acted as a team lead for volunteers in the largest student-run hackathon in the UK ( <b>IC Hack</b> ).