Edmund Goodman

www.edmundgoodman.co.uk | linkedIn/EdmundGoodman | github/EdmundGoodman

EDUCATION

BSc (Hons). Computer Science with intercalated year in industry

Coventry, UK | Sept 2020. - Jun. 2024

University of Warwick | Apple Inc.

Grades: First year: 1st (80.4%); Second year: 1st (78.4%)

WORK EXPERIENCE

APPLE INC. I CAD Design Verification Intern

St Albans, UK | Jul. 2022 - Jun. 2023

• Built tools and infrastructure for the design and design verification of Apple Silicon in **Python** and **Kotlin**.

UNIVERSITY OF WARWICK | IGEM COMPETITOR

Coventry, UK | Feb. 2021 - Sept. 2021

• Designed the assessed wiki website, and implemented a model of the spread of antibiotic resistant pathogens.

HUBER+SUHNER POLATIS | SOFTWARE ENGINEERING INTERN

Cambridge, UK | Jul. 2020 - Sept. 2020

• Updated a testing harness for fibre-optic switches to **Python 3**, refactored the **VBA** backend of a corporate planning document, and worked on a **Java** implementation of the NETCONF call home protocol.

PROJECTS

COMPUTER SCIENCE REVISION GUIDE

MARKDOWN, JAVA, C, HASKELL, GIT

Apr. 2021 - Present

- Co-founded and administrated an **open source** revision resource for the first year Warwick computer science course, used by over 100 students, and with contributions from over 25.
- Managed pull requests and issues following open source best practices, communicated with the university to ensure the project was acceptable, and contributed to the notes for every module I took.

ENGINEERING EDUCATION SCHEME

PYTHON, ELECTRONICS, MANUFACTURING

Sept. 2018 - Apr. 2019

- Lead the software aspect of the school "Engineering Education Scheme" entry, building an autonomous tennis ball collecting <u>robot</u> to the help sports teachers.
- Implemented first principles **image recognition** for tennis balls, and wrote a search algorithm to collect them, along with contributing to the hardware aspect, by manufacturing parts of the shell, and battery and flywheel mountings.

ROUSE RESEARCH

PYTHON, NUMPY, NEURAL NETWORKS

Sept. 2018 - Apr. 2019

- Received a Distinction for an essay titled "How effective are machine learning algorithms compared to traditional analytical techniques with respect to playing abstract games".
- Derived the mathematical foundations of **back-propagating neural networks** from first principles, and implemented neural networks, and genetic and tree search algorithms to play simple games in Python.

ACHIEVEMENTS

Music: Trinity Guildhall Grade 8 Trumpet, ABRSM Grade 7 Singing, <u>Pro Corda</u> national chamber music finalist (trumpet dectet), previous head chorister of Jesus College Choir.

Cyber Discovery: Finalist to the "Elite" phase in 2017-19 of <u>Cyber Discovery</u>. In 2018 from \sim 30,000 I was one of \sim 180 selected for the SANS course <u>SEC504</u>: "Hacker Tools, Techniques, Exploits, and Incident Handling", and its associated GIAC certification. In 2019 from \sim 70,000 I was one of \sim 240 selected for <u>FOR500</u>: "Windows Forensic Analysis".

Gold Crest award, and Gold level industrial cadet: Awarded following completing the above EES project.

Cadet Sergeant, Air Cadet Leadership Course graduate: Held responsibility over other cadets, and was one of \sim 240 each year to graduate a demanding week long course at RAF Cranwell teaching practical leadership skills.