

Timothy Jabez Newman

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SUMMARY

Electrical engineering student with interest in Software, Power electronics and Semiconductors. Enjoys learning about new technologies and solving problems.

Projects

Analog Music Synthesizer - 2021

1st Year Group Project (Best project in category)

- Created and simulated an 88-key analog music synthesizer in LTSpice
- Considered the product design specifications, costs, power consumption and waveform quality
- Created a Python program to transcribe frequencies from a CSV file to piece-wise voltage level directives in LTSpice for testing

LtSpice Python Latex

Optiver TraderCraft - 2021

2nd Placed Team in simulated trading competition

- Created a Python trading algorithm and competed with other teams to make highest profit
- Was selected to attend Insights Days program

Python

Personal Website - 2021

Static website with content management system

- Created website from scratch using GatsbyJS for the front-end and Strapi.io for the backend and content management system
- Optimized layout and images for different screen sizes
- Setup continuous deployment on Netlify and Heroku from Github

HTML CSS ReactJS GatsbyJS Strapi.io GraphQL
NodeJS Netlify Heroku Github

SKILLS

Languages: Python, HTML, CSS, Javascript, C++, SQL

Tools: Autodesk Fusion 360, LTSpice, WordPress, Microsoft Excel, Word and PowerPoint

Other: Version Control, Web, Deep Learning

EDUCATION

Electrical and Electronic Eng - 2020-2024

- Masters, Imperial College London
- **1st Year** overall grade: 74.31%; Modules: Programming for Engineers, Analysis and Design of Circuits, Digital Electronics and Computer Architecture, Mathematics

International Baccalaureate - 41/45 - 2019

- Anglo-Chinese School (Independent), Singapore
- HL Math 7, HL Physics 7, HL Chemistry 7

Online Courses

IBM Fullstack Cloud Developer Cert - 2021

- Completed 10 courses on various Application Development and **Cloud technologies**
- These include "Introduction to Containers w/ **Docker**, **Kubernetes** and **OpenShift**", "**Python** for Data Science, AI and Development", "Developing Applications with **SQL**, **Databases**, and **Django**" and "Application Development using **Microservices** and **Serverless**"

Deep Learning Specialization - 2020

- Completed online course on the basics of **Deep Learning** including CNNs, RNNs, hyperparameter tuning, optimization and structuring ML projects

Intro to Digital Manufacturing - 2020

- Completed online course on foundational concepts of **Fusion 360** CAD/CAM software
- Learned about digital manufacturing, principles of sustainable design, and manufacturing processes

ACTIVITIES / INTERESTS

- Technology Associate at IC InvestmentSoc
- Webmaster and Equipment Officer at IC AstroSoc
- Maths tutor for GCSE and A Levels on **EasyA App**
- Amateur violinist and pianist with ABRSM grade 7 Piano