# BEN STEEL

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#### **EDUCATION**

#### University of Bristol

Sep 15 - Jun 19

Integrated M.Eng. and B.Eng. in Computer Science and Electronics

First Class (80%) (4.0 GPA Equivalent)

Awards: Alumni Academic Achievement Award for top 3 performance in Faculty of Engineering in first year

# Exchange Year at McGill University

Aug 17 - May 18

GPA: 3.52

## **EXPERIENCE**

#### Maya Heat Transfer Technologies

Jun 19 - Oct 19

Montreal, Canada

 $Software\ Development\ Intern$ 

- · Used Python and C# to develop workflow automation extensions for Siemen's NX CAD/CAM/CAE software, using the NXOpen API.
- · Gained experience writing professional quality software as part of a team using an Agile test driven development methodology.
- · Became competent using Git, GitLab, and VSCode in a industrial, shared environment.

# Biosignal Interaction and Personhood Technology Lab, McGill

May 18 - Aug 18

Montreal, Canada

- Android Developer
- · Lead developer on Biomusic Android app, creates biosignal derived music for improved patient/carer relations.
- $\cdot \ \text{Worked with contracting backend developer to add database storage functionality using MySQL and Realm}.$
- · Created data visualisation GUI for biosignal data using Android Studio.
- · Prototyped machine learning based signal processing algorithms in MATLAB and Python.

#### Visual Systems Lab, McGill

Sep 17 - Apr 18

Research Assistant

Montreal, Canada

- · Used local SGE computing cluster system to improve processing times due to size of datasets (order of TBs).
- · Became familiar with Bash to move and manipulate datasets, and gained competence in using Unix based operating systems.

# Control Techniques Ltd.

Jun 16 - Aug 16

Summer Intern

Newtown, Wales

· Debugging an ARM microprocessor via JTAG, using industry level software, in an industrial environment.

# **PROJECTS**

#### Modelling all Optical Neural Networks in Python - Masters Research Project

Sep 18 - Apr 19

- · Trialling complex valued convolutional neural networks implemented with a novel all optical architecture.
- · Modelling novel architectures and performing experiments using NumPy and TensorFlow.

# Music Streaming Cloud Based Web App

Nov 18 - Dec 18

- · Using Flask and Vue.js to create a music streaming site, using the Spotify API for extra features.
- · Hosted on AWS Lambda using the Serverless Framework, using DynamoDB and S3 for storage.

## Face Detection and Age Classification using OpenCV - Group Project

Dec 17

· Detecting face feature extraction, using OpenCV, and age classification using scikit-learn.

#### **SKILLS**

Computer Languages Software Python, Java, C#, MATLAB, C/C++, Vue.js, Bash AWS, Git, Visual Studio/Code, Gitlab, Android Studio, Ubuntu, LaTeX