#### **Education**

#### **PhD Computer Science**

University of Edinburgh, 2018-2021

- Studying efficient representation structures and optimisations under the supervision of Professor Michael O'Boyle and Professor Amos Storkey.
- Organising committee member for 1st Workshop on Emerging Deep Learning Accelerators at HiPEAC 2019. Reviewer for Neural Architects (workshop at ICCV '19), BMVC '19.
- Open source paper replications, tutorials on Gaussian Processes, Python programming.

## MSc Computer Science (Distinction)

University of Edinburgh, 2017-2018

- Taught modules on Machine Learning and Parallel Architectures with a project on accelerating training speeds for neural machine translation models.
- Thesis on hardware adaptive deep learning for embedded GPUs. Replicated deep learning papers in Python and C++ using PyTorch and Tensorflow.

# **BSc Computer Science** (1st class)

University of Birmingham, 2014-2017

- Specialized in machine learning and compilers. Final year courses on statistics, linear algebra and data analysis with project on using neural networks for enhancing stochastic process models.

# Technical Skills

Languages: C, C++, Python, OCaml, Bash, CUDA, OpenCL.

Other: Deep Learning, PyTerch, Optimising Compilers, Linear A

Other: Deep Learning, PyTorch, Optimising Compilers, Linear Algebra.

### **Experience**

#### **Data Science Intern**

Lattice Training, 2017

Summer internship analysing athlete profiles and using machine learning to predict and develop areas of weakness in rock climbers.

# **Technology & Data Summer Analyst**

Morgan Stanley, 2016

Ten week internship in the Technology & Data group at Morgan Stanley. Worked as a full stack engineer building tools for investigating internal dataflow with Scala.

#### **Campus Ambassador**

Morgan Stanley, 2015

Voted Campus Ambassador of the Year after promoting Morgan Stanley at university events and careers fairs to fellow students.

## **Publications**

**BlockSwap: Fisher-guided Block Substitution for Network Compression.** <u>J. Turner,</u> E. Crowley, A. Storkey, M. O'Boyle. *Currently under submission.* 

**Distilling with Performance Enhanced Students.** <u>J. Turner</u>, E. Crowley, A. Storkey, M. O'Boyle. *ARM Research Summit, 2019.* 

A Closer Look at Structured Pruning for Neural Network Compression. E. Crowley, J. Turner, A. Storkey, M. O'Boyle. *NeurIPS Workshop on Compact Deep Neural Networks, 2018.* 

Characterising Cross-Layer Optimisations for Deep Convolutional Neural Networks. J. Turner, J. Cano, V. Radu, E. Crowley, A. Storkey, M. O'Boyle. *IEEE International Symposium on Workload Characterisation, 2018.*