JACK TURNER

jackwilliamturner@icloud.com
github.com/jack-willturner

Education

PhD Computer Science, University of Edinburgh 2018-current.

- Studying acceleration methods for deep learning under the supervision of Michael O'Boyle as a member of the BayesWatch machine learning group.
- Organising committee member for 1st Workshop on Emerging Deep Learning Accelerators at HiPEAC 2019.

MSc (by Research) Computer Science, University of Edinburgh. Distinction.

- Taught modules on Machine Learning and Parallel Architectures with a project on improving convergence speed of neural machine translation systems.
- Thesis on hardware adaptive deep learning for embedded GPUs. Replicated deep learning papers in Python and C++ using PyTorch and Tensorflow.

BSc Computer Science, University of Birmingham. 1st class (hons).

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

Technical Skills

Programming Languages: C/C++, Python, Haskell, Java, Scala, SQL.
Other: Computer Architecture, Deep Learning, PyTorch, Tensorflow, Compilers, Linear Algebra.

Employment

Data Science Intern - June 2017
Lattice Training
Summer internship analysing athlete profiles and using machine learning to predict and develop areas of weakness in rock climbers.

Technology and Data Summer Analyst — June to August 2016
Morgan Stanley
Ten week internship in the London office in the Technology & Data group. Worked as a full stack engineer building tools for investigating internal data flow with Scala and C#.

Spring Intern and Campus Ambassador — June 2015
Morgan Stanley
Ten week internship in the London office in the Technology & Data group. Worked as a full stack engineer building tools for investigating internal data flow with Scala and C#.

Publications

BlockSwap: Fisher-guided Block Substitution for Network Compression. J. Turner, E. Crowley, A. Storkey, M. O'Boyle. arXiv preprint, 2019.

Distilling with Performance Enhanced Students. J. Turner, E. Crowley, A. Storkey, M. O'Boyle. arXiv preprint, 2018.

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.