Edward Hedi Lu

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Education

University of Waterloo Sept. 2015 – May 2020
Honours Computer Science (BCS)
– 86.4% cumulative average, 1A and 2B Dean's Honours List

Work Experience

Yahoo! Inc. May – Aug. 2017
Software Developer Intern *Sunnyvale, CA*
– Worked on the NLP pipeline powering Newsroom, Sports and other Yahoo! products
– Improved article labelling precision by 6.2% by implementing a new embedding-based multi-label classification model using Java and DeepLearning4Java
– Optimized the model for use in production by reducing nearest neighbor search time by 95% using locality sensitive hashing
– Designed and prototyped a dynamic embedding-based content recommendation system
– Refactored model code using TensorFlow for training on GPU machines

Ontario Institute for Cancer Research May – Aug. 2016
Frontend Developer Intern *Toronto, ON*
– Worked on a platform that allows researchers to build custom surveys
– Designed and implemented responsive UI components such as modal dialogs, menus, forms and progress indicators using JavaScript, React, Redux and CSS
– Tested and improved site accessibility and cross-browser compatibility

Projects

Q-Trader – *github.com/edwardhdlu/q-trader* Sept. 2017
– Built an agent that predicts profitable short-term trading actions from stock price data
– Implemented Q-learning in a trading environment using Python and Keras
– Experimented with various state representations and reward functions to optimize profit

Digit Identifier – *github.com/edwardhdlu/digit-identifier* Jan. 2017
– Built a web app that identifies numbers from photos
– Trained a CNN using TensorFlow that achieves 85% test accuracy on the Street View House Numbers dataset
– Extended TensorFlow by implementing new activation functions and gradients using C++
– Built a Flask server to run the model on image data sent from a jQuery interface

Skills

Languages – *Python, Java, C++, JavaScript*
Frameworks – *TensorFlow, DL4J, Keras, jQuery, React, Flask*