DYLAN LABATT RANDLE

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EDUCATION

Harvard University — Cambridge, MA
M.S. in Data Science — *Expected May 2020*

· Relevant coursework: Advanced Data Science, Stochastic Methods & Bayesian Inference, Computational Systems Development, High Performance Computing

University of California, Berkeley — Berkeley, CA
B.S. in Industrial Engineering & Operations Research — *May 2016*

· Honors: High Honors at Graduation, Phi Beta Kappa, Tau Beta Pi, Frank Kraft Award

· Relevant coursework: Statistics & Machine Learning, Probability, Optimization, Stochastic Processes

RELEVANT EXPERIENCE

Harvard University — Cambridge, MA
Research Assistant — *Nov 2018 - Present*

· Conducting research on deep learning for turbulence modeling, specifically using neural networks to solve partial differential equations. Supervised by Pavlos Protopapas and David Sondak

Hubdoc — Toronto, Canada
Data Scientist — *Feb 2017 - July 2018*

· Developed and deployed deep learning system using LSTMs & CNNs for information extraction and text classification from financial documents. Greatly reduced cost ($1-3MM/year) and increased speed (14,000x faster for 80% of documents) of results. Used Python, Keras, Postgres, Ansible, AWS

· Conducted analyses (work prioritization, labor allocation, anomaly detection) as needed. Built data visualizations for company intranet. Presented results and recommendations to management team. Delivered introductory machine learning lecture to audience of 60+ people

BMO Capital Markets — Toronto, Canada
Financial Products Analyst — *May 2014 - Aug 2014*

· Conducted analyses of various debt products (swaps, swaptions, ABS, MBS). Wrote algorithm in C# to analyze relationship between delta-hedging frequency and returns for Canadian swaptions; found possible trading opportunities

RELEVANT PROJECTS

Twitter Troll Detection: `https://dylanrandle.github.io/troll_classification`

· Achieved 96% accuracy in classifying tweets as trolls, using a dataset of Twitter handles indicted for meddling in the 2016 U.S. presidential election

Automatic Differentiation: `https://github.com/dylanrandle/autograd`

· Built a Python package implementing automatic differentiation (forward and reverse mode). Used to implement gradient descent and Adam optimizers, with extensive documentation.

TECHNICAL SKILLS

Proficient	Python (numpy, pandas, scikit-learn, pytorch, tensorflow, pymc3), SQL, Git
Familiar	Javascript, C++, MATLAB, Latex