DYLAN LABATT RANDLE
+1-647-641-1994 | dylanrandle@g.harvard.edu | dylanrandle.github.io

EDUCATION

Harvard University Cambridge, MA
M.S. in Data Science Expected May 2020
- Relevant coursework: Advanced Data Science, Stochastic Methods for Optimization, Modeling and Inference, Systems Development for Computational Science, Computational Science Seminar

University of California, Berkeley Berkeley, CA
B.S. in Industrial Engineering & Operations Research, GPA: 3.9/4.0 (High Honors) May 2016
- Relevant coursework: Statistics and Machine Learning, Probability, Forecasting, Mathematical Programming, Nonlinear and Discrete Optimization, Stochastic Processes

RELEVANT EXPERIENCE

Institute for Applied Computational Science, Harvard University Cambridge, MA
Research Assistant Nov 2018 - Present
- Researching physics-aware machine learning methods for turbulence modeling, supervised by Pavlos Protopapas and David Sondak

Hubdoc Toronto, Canada
Data Scientist & Machine Learning Engineer Feb 2017 - July 2018
- Developed and deployed deep learning system (LSTM & CNN) for information extraction and text classification from financial documents. Saved $1MM+ per year by decreasing labor costs and service times by orders of magnitude from previously human-based system. Grew machine learning team from 0 to 5 people. Used Python, Tensorflow, Keras, AWS, PostgresSQL, Ansible
- Built data visualizations for company intranet using Javascript, Python, C3
- Presented results and recommendations to management team; delivered introductory machine learning lecture to audience of 60+ people

BMO Capital Markets Toronto, Canada
Financial Products Summer Analyst Summer 2014
- Conducted analysis of various debt products (swaps, swaptions, ABS, MBS). Wrote algorithm in C# to analyze relationship between delta-hedging frequency and returns for Canadian swaptions
- Reviewed pitches and compiled summaries of daily trading activity

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 from the Internet Research Agency, an organization indicted by prosecutors 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) in NumPy. Includes gradient descent and Adam optimizers, with extensive documentation.

LEADERSHIP EXPERIENCE

Taylor Statten Camps Algonquin Park, Canada
Long Trip Counselor Summer 2015/2016
- Led 50-day and 36-day wilderness canoe trips through Northern Ontario and Minnesota. Planned route and food drops, navigated 2500km+ of rugged wilderness, and ensured safety of numerous groups of 7 teenage boys

SKILLS

Computer: Proficient in Python (numpy, pandas, scipy, scikit-learn, pytorch, tensorflow, pymc3), SQL, Git; familiar with Javascript, C++, MATLAB, Latex