

DYLAN LABATT RANDLE

Website: dylanrandle.github.io ◇ LinkedIn: [dylanrandle](#) ◇ GitHub: [dylanrandle](#)

EDUCATION

Harvard University

M.S. Data Science

Cambridge, MA

May 2020

Applied Computation Scholarship, Special Distinction in Teaching

Thesis: Unsupervised Neural Network Methods for Solving Differential Equations

University of California, Berkeley

B.S. Industrial Engineering & Operations Research

Berkeley, CA

May 2016

High Honors, Dean's Honors, Frank Kraft Award

Coursework: Statistics, Optimization, Stochastic Processes, Simulation, Decision Analysis

TECHNICAL SKILLS

Languages Python (Pandas, Numpy, Scipy, Scikit-Learn, Pytorch, Tensorflow)

Tools AWS, Ray, Spark, Docker, Git, Jupyter

Topics Machine/deep learning, statistical modeling/inference, optimization

RELEVANT WORK EXPERIENCE

Amazon Robotics

Data Scientist II

North Reading, MA

July 2020 - Present

- Leveraging data science to improve automated robotic fulfillment and transportation systems responsible for delivering billions of packages to customers across the globe

Amazon Robotics

Data Scientist, Intern

North Reading, MA

Jun 2019 - Aug 2019

- Developed AutoML package encapsulating data preprocessing with PySpark on AWS EMR and model development with PyTorch, Scikit-Learn, Statsmodels, and SHAP on AWS SageMaker
- Reduced time and complexity of ML model development and analysis; code package used by multiple analysts for a broad set of applications on a daily basis

Hubdoc, Inc.

Data Scientist

Toronto, Canada

Jan 2017 - Jul 2018

- Designed, developed, and deployed deep learning NLP system for information extraction from financial documents
- First data scientist hired; hired and led team of two data scientists
- Acquired by Xero for \$70 million USD

Harvard University, School of Engineering & Applied Sciences

Teaching Fellow

Cambridge, MA

Nov 2019 - May 2020

- Introduction to Data Science (boosting, deep learning); Computing Foundations for Computational Science (AWS, Hadoop, Spark)
- Special Distinction in Teaching

SELECTED PROJECTS

Unsupervised Learning of Solutions to Differential Equations with Generative Adversarial Networks

- Researched and developed novel *unsupervised* generative adversarial network training [algorithm](#) leading to orders of magnitude higher accuracy over traditional deep learning approaches for solving differential equations

Differentiable Neural Architecture Search for Scientific Datasets

- Applied differentiable neural architecture search to scientific datasets (graphene cutting, galaxy zoo, chest x-rays); documented results and provided practical recommendations in [blog post](#)

Interpretable Reinforcement Learning for Healthcare with Decision Sets

- Applied imitation learning and decision sets to learn explicitly interpretable policies for sepsis treatment; [results](#) achieved performance parity with black-box models

For a complete portfolio of my work see: dylanrandle.github.io

ADDITIONAL WORK & LEADERSHIP EXPERIENCE

Harvard Graduate Canadian Club

Treasurer

Cambridge, MA

2019-2020

- Responsible for maintaining club finances
- Co-led and organized events for graduate students (e.g. Thanksgiving dinner, election viewing party)
- Met with Canadian Ambassador in Boston to discuss future engagements

Taylor Statten Camps

Canoe Trip Guide

Algonquin Park, Canada

Summer 2015, 2016

- Co-leader of 36 and 50-day canoe trips through remote Canadian/American wilderness
- Navigated ~3000 km of rugged landscape by canoe and portage

BMO Capital Markets

Financial Products Analyst

Toronto, Canada

Summer 2014

- Delta-hedging frequency optimization algorithm for interest rate swaps/swaptions
- Analysis uncovered market opportunities for fixed-income derivatives traders

Berkeley Industrial Engineering Honors Society

Vice President

Berkeley, CA

2013-2014

- Vice president responsible for engaging with faculty members and organizing events for members
- Organized and participated in IEOR research meetings