

# DYLAN LABATT RANDLE

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

## EDUCATION

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### 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

## RELEVANT WORK EXPERIENCE

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### 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

### BMO Capital Markets

*Financial Products Analyst*

Toronto, Canada

*May 2014 - Aug 2014*

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

## SELECTED PROJECTS

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For all of my available work and further details, see: [dylanrandle.github.io](https://dylanrandle.github.io)

### Unsupervised Neural Network Methods for Solving Differential Equations

- Researched algorithms for solving differential equations with unsupervised neural networks; developed novel generative adversarial network training scheme leading to orders of magnitude higher accuracy over traditional deep learning approaches

### Interpretable Reinforcement Learning for Healthcare

- Combined interpretable models and imitation learning from black-box experts to learn explicitly interpretable policies with applications to sepsis treatment

## TECHNICAL SKILLS

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<b>Languages</b>	Python (Pytorch, Scikit-Learn, Statsmodels, PyMC3, Pandas, Numpy, Scipy), SQL
<b>Tools</b>	AWS, Ray, Spark, Docker, Git
<b>Topics</b>	Machine/deep learning, statistical modeling/inference, optimization

## LEADERSHIP EXPERIENCE

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<b>Treasurer</b>	Harvard Graduate Canadian Club
<b>Vice President</b>	Berkeley Industrial Engineering Honors Society

## ADDITIONAL WORK EXPERIENCE

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<b>Taylor Statten Camps</b>	Algonquin Park, Canada
<i>Canoe Trip Guide</i>	<i>Summers 2015, 2016</i>

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