

Dylan Labatt Randle

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SUMMARY

Machine learning scientist with 5+ years experience and a proven track record building and deploying AI systems for **robotics**, **computer vision**, and **natural language processing**.

EXPERIENCE

Senior Data Scientist, Machine Learning

Amazon Robotics

North Reading, MA, USA

Jul 2020 – Present

- Developed machine learning and optimization systems for **robotic manipulation** and **path planning**
- Delivered performance improvements of **+35%** and cost savings of **\$10 million/year**
- Received **Inventor Award (x2)**

Data Scientist, Machine Learning

Hubdoc

Toronto, ON, Canada

Feb 2017 – Jul 2018

- Developed machine learning system for **natural language processing** of financial documents
- Deployed to production with **99% precision** at **95% recall**, while reducing extraction time by **99.99%**

EDUCATION

Harvard University

Master of Science in Data Science (GPA: 4.0)

Cambridge, MA, USA

Aug 2018 – May 2020

- **Scholarship** in Applied Computation, **Distinction** in Teaching

University of California, Berkeley

Bachelor of Science in Industrial Engineering & Operations Research (GPA: 3.9)

Berkeley, CA, USA

Aug 2012 – May 2016

- **High Honors** (*magna cum laude*), Frank Kraft Award, **Phi Beta Kappa**, Tau Beta Pi, Alpha Pi Mu

PROJECTS

Grasp Learning for Robotic Item Manipulation

Amazon Robotics

- Developed **Vision Transformer** and **PointNet++** models for learned grasp generation and ranking
- Achieved **+22% improvement** in grasp evaluation performance

Computer Vision for Robotic Damage Detection

Amazon Robotics

- Developed **ResNet**-based visual anomaly detection model for damage detection
- Achieved **+25% improvement** in damage detection performance

Simulation-Based Optimization for Robotic Path Planning

Amazon Robotics

- Developed simulation-based optimizer for **path planning** on fleets of thousands of mobile robots
- Achieved **+10% improvement** in robotic system throughput

Physics-Informed Neural Networks

Harvard University

- Developed **generative adversarial networks** for solving differential equations
- Workshop [paper](#) published at **ICML 2022**

SKILLS

- **Languages:** Python, C++, Javascript/Typescript, SQL
- **Libraries:** PyTorch, Keras/Tensorflow, OpenCV, Open3D, Pandas, NumPy, SciPy, Scikit-Learn, React
- **Platforms:** AWS, Docker, Firebase, Linux, MacOS