Dylan Labatt Randle

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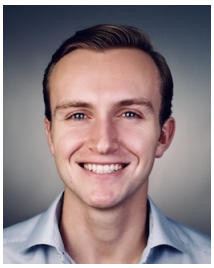

Summary

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

Experience

Senior Applied Scientist, Machine Learning — North Reading, MA, USA
Amazon Robotics — *Jul 2020 – Present*

- Led team of scientists developing AI systems for robotic manipulation and path planning
- Delivered performance improvements of +35% and cost savings of $10 million/year
- Named inventor on two patents

Data Scientist, Machine Learning — Toronto, ON, Canada
Hubdoc — *Feb 2017 – Jul 2018*

- First ML scientist at the company (acquired for $70MM USD)
- Developed ML 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 — Cambridge, MA, USA
Master of Science in Data Science (GPA: 4.0) — *Aug 2018 – May 2020*

- Recognized with Scholarship in Applied Computation and Distinction in Teaching
- Research and coursework focused on machine learning
- Thesis: *"Unsupervised Neural Network Methods for Solving Differential Equations"*

University of California, Berkeley — Berkeley, CA, USA
Bachelor of Science in Industrial Engineering & Operations Research (GPA: 3.9) — *Aug 2012 – May 2016*

- Recognized with High Honors (*magna cum laude*) and Frank Kraft Award
- Inducted into Phi Beta Kappa, Tau Beta Pi, Alpha Pi Mu
- Coursework focused on statistics and optimization

Sample Projects

- **Grasp Learning for Robotic Item Manipulation:** Developed ViT and PointNet models for learned grasp generation and ranking. Deployed to production with 36% reduction in grasp failures.
- **Computer Vision for Robotic Damage Detection:** Developed ResNet-based visual anomaly detection model for damage detection. Achieved +25% improvement in performance in offline testing.
- **Simulation-Based Optimization for Robotic Path Planning:** Developed simulation-based optimizer for path planning on fleets of thousands of mobile robots. Achieved +10% improvement in robotic system throughput. Paper published at internal conference.
- **Physics-Informed Neural Networks for Solving Differential Equations:** Developed generative adversarial networks for solving differential equations. Achieved orders of magnitude reduction in solution error over classical approaches. Paper published at ICML 2022 workshop.

Technical 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