# Doug de Jesus

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## **Education**

**New York University** 

New York, NY

M.S. in Computer Engineering; 4.0 GPA

September 2021 – December 2023

**Relevant coursework**: Robot Localization and Navigation, Computer Vision, Robot Perception, Swarm Robotics, Interactive Medical Robotics, Real-time Embedded Systems, Deep Learning

**University of California, Los Angeles** 

Los Angeles, CA

B.S. in Applied Mathematics, Specialization in Computing; 3.6 GPA

*September 2010 – June 2014* 

# **Work Experience**

Codecademy

New York, NY

Staff Software Engineer

February 2022 – August 2022

- Led development and technical design of several new products and services from conception to deployment, each spanning multiple engineering teams.
- Established engineering best practices, code review processes, training and mentorship programs, and hiring practices. Mentored engineers throughout the organization.

Senior Backend Engineer

June 2019 – February 2022

- Designed and improved backed services for payments, subscriptions, data tracking, course catalog, content management, search, and remote code evaluation.
- Implemented a delayed payment trial model that drove annual revenue increase of \$1M+.
- Transformed the course catalog from a static list to a dynamic, tag-based system with sorting and filtering. Implemented caching for fast performance and scalability.
- Created a machine learning-driven recommendation service from scratch.

**Facebook** 

Menlo Park, CA

Software Engineer

*August 2017 – May 2019* 

- Built systems, tools, automation, and machine learning to defend against spam and abuse.
- Automated the deployment of weekly retrained ML models to reduce manual effort.
- Implemented a graph embedding covering 1B+ users that was used to improve training data quality, extract new features, and increase classifier recall.
- Helped mitigate a security breach affecting 50 million users.
- Improved incident response time by 90% by adding anomaly detection around reports.

#### **REAL Software Systems**

Los Angeles, CA

Software Engineer Iune 2014 – July 2017

• Developed enterprise software for royalties accounting and IP management.

- Led development of a data import service that processes 100k+ sales transactions at a time.
- Refactored extensive legacy codebase to improve reusability, readability and stability.

## **Skills**

**Programming languages:** Python, Ruby, C/C++, SQL, MATLAB, JavaScript/TypeScript, Go, PHP **Technologies:** PyTorch, ROS, OpenCV, Scikit-learn, Docker, Rails, AWS, Pandas, Simulink, Git **Concepts:** Machine Learning, CNNs, Computer Vision, Kalman Filtering, Embedded Systems