Rodney S. Lafuente Mercado

1002 Elm St. Apt. 106, Vermillion, SD 57069| 617.430.5241 | lafuentemercado@college.harvard.edu | rodneylafuente.com

EDUCATION

Harvard University (GPA: 3.61/4.00, ACT: 33/36)   **Cambridge, MA**
A.B. with Honors in Applied Mathematics-Computer Science   March 2023
> **Highlighted coursework:** Mathematical Modeling • Theoretical Linear Algebra and Applications • Complex and Fourier Analysis • Probability and Random Variables • Machine Learning • Artificial Intelligence • Functional Programming • Systems Programming and Machine Organization • Operating Systems

SKILLS

Software: Python, JavaScript/TypeScript, Java, C++, Golang
Machine Learning: Scikit-Learn, SciPy, and Numpy, PyTorch and Tensorflow (Keras)

WORK EXPERIENCE

Harvard Medical School   **Cambridge, MA**
Machine Learning Researcher   January 2022 – May 2022
- Worked in Prof. Pamela Silver's lab in the Systems Biology department at Harvard Medical School's Longwood Campus.
- Developed an analysis of puncta (dense spots) in images of SARS-CoV-2 nucleocapsids in Python.
- Implemented Segmentation algorithms and Ensemble Models in Jupyter Notebook, on HMS's O2 Computing Cluster.
- Led instructive meetings in the basics of software development and machine learning to non-technical staff.

Amazon.com, Inc.   **Seattle, WA**
Software Engineering Intern   June 2021 – August 2021
- Learned and applied principles of cloud computing and servers to projects within the AWS Cryptography Organization, in a team of eight people. Worked primarily with Java in a CI/CD environment.
- Designed and implemented changes to the AWS Signer API, Amazon' code signing service.
- Rapidly learned how to use internal tools for development as well as coding libraries as necessary for projects. Worked with AWS services such as API Gateway, DynamoDB, Lambda, X-Ray, and CloudWatch.

StrattyX (YCombinator Summer '19)   **San Francisco, CA**
Quantitative Analyst   September 2019 – February 2020
- Second employee at Y-Combinator backed company developing algorithmic trading tools for retail investors.
- Served as representative to venture capital firm representatives at TechCrunch Disrupt and CES. F to four cities (Las Vegas, Atlanta, San Francisco, Chicago) in the U.S. in order to educate and attract investors on our product.
- Provided valuable feedback in product iterations, both in technical capacity and in evaluating product-market fit.

TEACHING

Harvard School of Engineering and Applied Sciences   **Cambridge, MA**
Course Assistant   January 2022 – May 2022
- Served as one of nine Course Assistants for CS 20: Discrete Mathematics for Computer Science of over 200 students.
- Led Office Hours every week and lead Section meetings where a class of ~20 students was lead through elementary mathematical concepts meant for preparing students for posterior work in theoretical computer science and mathematics.
- Graded assignments and aided students during lecture. Responded to conceptual questions on the platform Ed.

Harvard Summer School   **Cambridge, MA**
Proctor, Tutor   June 2019 – August 2019
- Directly responsible for 14 high school students' safety and well-being. Lived in same building as students and provided 24/7 health-related support. Coordinated residential and program-wide events for cohorts of 30-40 students.
- Tutored students in college-level Computer Science, Mathematics, and Biology while not providing support as a proctor.