MARTIN RODRIGUEZ

Master's Student in Electrical Engineering

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ENGINEERING/TECH EXPERIENCE

Quality Assurance Lead, Quality Assurance Tester

Plus QA

Jun. 2018 – Mar. 2022 | Portland, OR

- Worked with clients to develop comprehensive testing strategies and provide assistance to existing QA teams
- Performed quality assurance testing for mobile and web apps on a variety of platforms

Electrical Engineering Intern

Lam Research

Mar. – Dec. 2017 | Tualatin, OR

- Researched and developed methods of manufacturing and characterizing atomic force microscope probes using an electron microscope, leading to improved tool sensitivity and efficiency

Undergraduate Researcher

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Jun. – Sep. 2016 | Portland, OR

- Optimized neural network (reservoir computation) techniques in Python and MATLAB and applied a novel filtering algorithm to the output layer in reservoir simulations, increasing accuracy and reducing simulation runtime

Summer Intern

NASA Goddard Space Flight Center

Jun. – Aug. 2011 | Greenbelt, MD

- Designed orbit simulations in MATLAB, aiding in the nascent stages of the CubeSat modular satellite systems for use in education program

PROJECTS

Real-Time Tempo Detection with Harmonic-Percussive Source Separation via Median Filtering

EE 522: Discrete Time Processing Final Project, Portland State University

2022

SEEKING

A full-time research or engineering role in the signal processing and machine learning space

ACHIEVEMENTS

Lam Research Core Values Scholarship Recipient, 2017
Lam Research

Multiple Engineering Cooperative Program (MECOP) Intern, 2017
Portland State University

Research Experience for Undergraduates (REU) Student, 2016
Portland State University

Ronald E. McNair Scholar, 2011
PSU McNair Scholars Program

Oregon Space Grant Recipient, 2011
Oregon NASA Space Grant Consortium

STRENGTHS

Writing | Research | Sound Design | Statistical Analysis | Embedded Systems | General Hacking

Python | NumPy | scikit-learn | OpenCV | librosa | Matplotlib | PyTorch | TensorFlow | C/C++ | Julia | MATLAB | bash | ARM/MIPS Assembly | LaTeX | Git | Jira

Ableton Live | TouchDesigner

EDUCATION

M.Sc in Electrical Engineering (Signal Processing and Machine Learning)

Portland State University

Jan. 2021 – Jan. 2024

Image Sorting and Sequencing using Canny Edge Detection and Hough Transforms

EE 513: Intro to Image Processing Final Project,
Portland State University

2022

Early Detection of Forest Fires with Environmental Sensors, Computer Vision, and Deep Learning Techniques in Python and TensorFlow

Capstone Project,
Portland State University/Intel

2019

SERVICE INDUSTRY EXPERIENCE

Prep Cook/Line Cook (Salads and Desserts)

Gumba

Jul. 2022 – Current Portland, OR

- Prepare food before service and during service on the cold side station

Dishwasher/Prep Cook

Gado Gado

Aug. – Oct. 2019 Portland, OR

- Washed dishes and performed light prep work

Dishwasher/Prep Cook

Clyde Common

Dec. 2017 – Jun. 2018 Portland, OR

- Washed dishes and performed light prep work and maintenance for the restaurant

Host/Server/Bartender/Dishwasher

Ned Ludd

Oct. 2014 – Mar. 2016 Portland, OR

- Began washing dishes, transitioned into performing host duties in the restaurant and serving and tending bar for the event space

Server/Bartender

El Sapo

Sep. 2013 – Aug. 2014 Austin, TX

- Began serving in the restaurant, moved to serving and bartending

Thesis title: Applying positive unlabeled learning techniques and using the KL divergence to improve geothermal surveying assessments

B.Sc. in Electrical Engineering (Embedded Systems)

Portland State University

Sept. 2015 – Sept. 2019