Piero F. Orderique

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Boston, MA

in/pforderique

Education

Massachusetts Institute of Technology

SB Computer Science Expected: May 2024

Society of Hispanic Professional Engineers, MIT Office of Sustainability Flood Risk Mitigation Team

Relevant Coursework:

Mathematics for CS, Intro to Algorithms, Physics E&M, Multivariable Calculus, Oral Communication

Columbus High School

Top 1%; Rank: 3 08/2016 - 05/2020

President: National Math Honor Society, Spanish Club VP: Student Council | Captain: Swim Team

4.723/4.0 GPA | ACT: 35 | 16 AP Courses 400+ hours of community service

Relevant Coursework:

AP CSP, AP CSA, AP Calculus BC, AP Physics C

Skills/Certificates

Programming

Most Experienced:

Python, Java

Familiar:

VBA, SQL, JavaScript, R, C++, LaTeX, HTML, CSS

Software

Android Studio, Processing, Excel, Git, ArcGIS NumPy, Scikit-learn, Matplotlib, Jupyter Notebook

Certificates

Esri: GIS Basics, 3D Visualization, Querying Data

IBM: Machine Learning with Python Microsoft: Introduction to C++ HarvardX: Data Science R Basics

UC San Diego: How Virtual Reality Works

Distinctions

Gates Scholar (<1% national acceptance rate)
President's Volunteer Service Award
HSF Scholar, Stamps Scholar, Foundation Fellow
National Hispanic Scholar, National AP Scholar

Work Experience

Software Engineer MIT Office of Sustainability

09/2020 - present

- Cut processing time in half by querying large datasets (SQL)
- Developed a process for identifying buildings affected by storm water in order to reduce insurance and tuition costs
- Design a Python package for reading and visualizing 300+ specialized data files using SciPy, matplotlib, and OOD
- Created custom functions (VBA) to enhance scalability

Project Associate Borinquen Foods

11/2017 - 08/2020

- Built and implemented an Arduino security system that sends messages to the owner when activated
- Updated security systems and feedback on a budget
- Quadrupled the restaurant's Google reviews and increased market reach by designing advertisements on Canva
- · Digitized checking accounts using Excel

Math Instructor Mathnasuim

06/2019 - 10/2019

- Instructed adults for exams (GRE, ASVAB, etc.) and oversaw the instruction of 70+ K-12 students
- Received 100% positive evaluations and rescheduling rates
- Accommodated Spanish-speaking students and applied training to work with students with learning disabilities

Projects

Path Finder

01/2021

Visual BFS Algorithm Program

Implemented a BFS algorithm (JS) to a visual 2D grid that finds a path from start to finish around user-made obstacles

Celebrity Feed Notifier Twitter Bot

02/2021

Utilized a Python twitter API to send detailed notifications to a users whenever the specified celebrities send a tweet

Arduino.Maker Social Media Educational Account

12/2018 - present

Promoted Arduino, Android, and web development projects using an educational Instagram account with 4000+ followers

COVID-19 ML Cases Predictor Data Visualizer

06/2020 - 07/2020

Designed a data visualization project (Python) that utilized a nationwide COVID-19 cases database and used scikit-learn to run a polynomial regression on the data

Paint Canvas - Free Android App

05/2020 - 06/2020

Wrote code (Java) to publish a drawing app that can store width, color, and patterns using a kid-friendly UI