

# Piero F. Orderique

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🌐 www.pforderique.com    📄 /pforderique

## Education

### Massachusetts Institute of Technology

SB Computer Science  
Expected: May 2024

GPA: 4.7/5.0

Society of Hispanic Professional Engineers, MIT Office of Sustainability Team, Sigma Nu Publicity Chair

#### Relevant Coursework:

Intro to Algorithms, Mathematics for CS, Physics EM, Multivariable Calculus, Oral Communication, Intro to Embedded Systems, Microeconomics, Design Thinking

### Columbus High School

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

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

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

## Skills/Certificates

### Programming

#### Most Experienced:

Python, Java

#### Familiar:

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

### Software

Flask, Android Studio, Socket IO, Excel, Git, ArcGIS  
NumPy, OpenCV, Matplotlib, Ubuntu Linux, jQuery

### 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

09/2020 - 05/2021

#### MIT Office of Sustainability

- Work helped identify a potential \$600M+ worth of damage to university property from storm flooding simulations
- Created custom functions (VBA) to enhance scalability
- Cut processing time in half by querying large datasets (SQL)
- Design a Python package for reading and visualizing 300+ specialized data files using SciPy, matplotlib, and OOD
- Reduced space storage by 99.99% (from 1.1TB to ~1MB) by filtering large global datasets on a remote Linux cluster

### Project Associate

11/2017 - 08/2020

#### Borinquen Foods

- 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

06/2019 - 10/2019

#### Mathnasuim

- Received 100% positive evaluations and rescheduling rates
- Accommodated Spanish-speaking students and applied training to work with students with learning disabilities

## Projects (see more at [www.pforderique.com](http://www.pforderique.com))

### AirChat

06/2021

#### Messaging Web-App

Deployed a Flask backend for a chatting application on Heroku (switched from AWS EB) using socket.io (JS) and PostgreSQL

### 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

02/2021

#### Twitter Bot

Utilized a Python Twitter API to send detailed notifications to users whenever user-specified celebrities send tweets

### COVID-19 ML Cases Predictor

06/2020 - 07/2020

#### Data Visualizer

Designed a data visualization project (Python) with matplotlib using a COVID-19 database and used scikit-learn to run a polynomial regression on the data to show trends.

### Paint Canvas - Free

05/2020 - 06/2020

#### Android App

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