pcm82.github.io

github.com/pcm82

pcm82@cornell.edu

443-739-8953 (cel)

FDUCATION

CORNELL UNIVERSITY

BA, COMPUTER SCIENCE 3.6 / 4 GPA

Sept. 2018- May 2021 Milstein Scholar

PHILLIPS ACADEMY ANDOVER

Sept. 2014- June 2018 Cum Laude

SKILLS

PROGRAMMING

Python (Proficient)
Java (Proficient)
C (Experienced)
OCaml (Experienced)
ARM Assembly (Experienced)
JavaScript (Learning)

SOFTWARE

Flask • PyTorch Jupyter • Mathematica

LANGUAGES

NATIVE OR BILINGUAL PROFICIENCY

Spanish • Portuguese • German

ELEMENTARY PROFICIENCY

Mandarin (3 years of study)

HONORS & AWARDS

DEAN'S LIST

CORNELL- FALL 2020

Awarded to students with exemplary academic records

TAPIA 2020 AWARD

CORNELL- AUGUST 2020

Awarded funding to attend 2020 ACM Tapia Computing Conference

MILSTEIN SCHOLAR

CORNELL- MAY 2019

One of 25 students in inaugural class of Milstein Program in Humanity and Technology

COMMUNITY ENGAGEMENT LEADERSHIP AWARD

PHILLIPS ACADEMY- JUNE 2018

Given for excellence in leading a community service program

EXPERIENCE

SOFTWARE DEVELOPMENT ENGINEER I (a) AMAZON

Jul. 2021 - Current

• Engineered solutions for streamlining the chargeback process in the payment risk engineering space

ML RESEARCHER (a) McMahon Lab for Quantum Computing

Aug.- Dec. 2019

- Developed PyTorch model for simulated physical computer (Coherent Ising Machine)
- Implemented differential equation-based neural networks for linear regression

CIRCUIT ENGINEER @ CORNELL UNIVERSITY PHYSICS LAB

Aug.- Dec. 2019

- Designed circuit for experimental sound laser
- Used function generator and oscilloscope to project any sound frequency in collimated beam, effectively a "sound laser"

SOFTWARE MARKET ANALYST (a) CANTO SOFTWARE

May- Aug. 2019

- Compiled report on digital-asset-management software market trends using 40+ unique sources including competitor infiltration
- Presented findings to 30 person office, material now used by sales team

PRO JECTS

OBSTACLE DETECTION HAT AUG. 2019- DEC. 2020

- Designed hardware and software for hat that detects obstacles in 60° arc ahead of user
- Managed market research team to interview people with low-vision (milstein-program.as.cornell.edu/h-t-seeing-sound)

MULTIPLAYER ONLINE GAME JUL. 2020-SEPT. 2020

- Developed probability algorithm based on client-sided known and unknown variables
- Developed algorithm to dynamically change and sync client-sided UI (github.com/CodingPerudo)

ONLINE ORBIT SIMULATOR JUN. 2020

- Designed JavaScript orbit simulator using differential equations and Newtonian physics
- Implemented collisions, gravitational force, and dynamic resizing (petermunn.me/gravitygame/ball_game.html)

RELEVANT COURSEWORK

COMPUTER SCIENCE

- Language and Information
- Intro to Analysis of Algorithms
- Foundations of Artificial Intelligence
- Operating Systems
- Embedded Systems