

EDUCATION

- **Drexel University**

B.S. Computer Science & B.S. Mathematics

Philadelphia, PA

Aug. 2015 – June 2020

COURSEWORK

Mathematics: Modern Analysis I & II, Numerical Analysis I & II, Probability & Statistics I & II, Abstract Algebra I & II, Combinatorics, Partial Differential Equations, Complex Variables, Intro to Optimization Theory

Computer Science: Advanced Programming Techniques, Data Structures, Web & Mobile App Development, Systems Programming, Systems Architecture, Software Design, Programming Language Concepts, Machine Learning, Software Engineering, Introduction to Parallel Computer Architecture

PROGRAMMING SKILLS

Languages: Python, Matlab, C, C++, CUDA, Javascript, Java, Go, Bash

Tools: pthreads, OpenMP, numpy, Flask, OpenCV, MySQL, SQLite, MongoDB

EXPERIENCE

- **Senior Design**

Project Manager, Software Developer

Drexel University, Philadelphia, PA

Sept 2019 - June 2020

- Worked with a team of 7 to develop GUI application and system backend for IoT device data collection and processing.
- Effectively communicated project scope and schedule with advisors.
- Directed team through requirements gathering, design, development, and testing phases.
- Investigated and identified requirements via stakeholder interviews and communication with subject matter experts, documented in software requirements specification.
- Designed modular software system to satisfy requirements, documented in software design document.
- Developed Python-based database interface module to transfer IoT device data to and from multiple database systems.
- Developed Python-based API to process requests to system backend.

- **Drexel University College of Medicine**

Research Assistant

Department of Pathology & Laboratory Medicine

April 2018 - Sept 2018

- Performed analysis of breast cancer slides using computer vision tools.
- Automated tests on large samples of data (1000+ images).
- Used artificial intelligence algorithms to develop predictive models for cancer outcomes.

- **Brandywine Global Investment Management**

Software Developer

Philadelphia, PA

April 2017 - Sept 2017

- Developed Python scripts to track business processes at the firm, including:
 - * Compiling documentation for 1400 batch jobs from multiple sources,
 - * Identifying and documenting modifications of batch jobs,
 - * Reporting on success of batch jobs.
- Developed code that interfaced with large datasets in Excel and SQL.

- **Freshman Design**

Software Designer & Developer

Drexel University, Philadelphia, PA

January 2016 - June 2016

- Developed machine vision program capable of detecting building windows.
- Implemented machine vision algorithms using OpenCV library.
- Interfaced hardware and software using Raspberry Pi, camera, ultrasonic, and LiDAR sensors.