

Education

Elizabethtown College, Elizabethtown, PA **3.889 GPA** ▪ 2020
Double Bachelor of Science in **Computer Engineering** and **Computer Science**

Relevant Coursework

Engineering: Advanced Computer Engineering ▪ Computer Architecture ▪ Electronics ▪ Circuit Analysis ▪ Physics I, II
Digital Design and Interfacing

Computing: Systems Programming ▪ Compiler Design ▪ Database Systems ▪ Data Structures ▪ Computer Science I, II
Software Engineering

Mathematics: Differential Equations ▪ Calculus I, II, III ▪ Linear Algebra ▪ Mathematical Proofs

Honors & Activities: Founders Scholar ▪ Emergent Scholar ▪ Dean's List ▪ Faculty Student Award in Engineering & Physics ▪ Hager Scholar in Engineering and Physics ▪ Vice President of the Computer Science Club
ACM ICPC Competition

Technical Skills

Languages: Java ▪ C ▪ C++ ▪ MySQL ▪ JavaScript ▪ MATLAB ▪ Assembly ▪ Arduino ▪ Python ▪ Verilog

Software: Logisim ▪ Linux ▪ Github ▪ Autodesk Eagle ▪ AutoCAD ▪ Inventor ▪ MS Office ▪ PSpice

Hardware: PLC ▪ FPGA ▪ Arduino ▪ Raspberry Pi

Experience

Engineering TA ▪ Elizabethtown College Jan 2018 - Present

- Educate and assist engineering students with designing and fabricating their freshman projects
- Assess student circuits, designs, models, and other work in Computer Engineering and Architecture courses
- Test and maintain the Computer Engineering lab and all its equipment

Freelance Contractor May 2017 - Present

- Developed a loyal client base for a variety of notable services. Equipment maintenance and repair for a SERVPRO company. Extensive interior and exterior design and renovation. Landscaping.

Project Instructor ▪ The Factory Ministries March - May 2018

- Educated senior citizens as part of the Rural Intergenerational Connections Project in topics relating to the internet, technology, scam prevention, and communication.

Projects

Otis Neural Network Elizabethtown College

- Researched and developed as part of an agile software engineering team a neural network capable of autonomously scaling, learning, and making decisions from user defined data. Web panel and shell UI.

DiddyBot Personal Project

- Conceived and maintain a scripted Discord user for my server. Written in JavaScript, running on node.js. Data driven using a MySQL database. Implements several powerful APIs. Over 40 unique commands. Logarithmic user leveling system.

Quad Core Vector Array Computer Elizabethtown College

- Designed and tested a computer at gate level with twenty-six unique byte-instructions. Implemented using pipeline with multiple working finite state machines for complex instructions. Utilised a programmable code stack for autonomous execution alongside an adjustable clock frequency. Developed in Logisim.

MiniBasic Compiler Elizabethtown College

- Developed a source code handler, lexical analyzer, parser, and globally optimized assembly code generator in Java.