

Kevin Carman

carman@etown.edu
(484) 629-5520
carman.github.io/Website/

Education

Elizabethtown College, Elizabethtown, PA

3.889 GPA • 2020

Bachelors of Science: **Computer Engineering** and **Computer Science**

Relevant Coursework

Engineering: Advanced Computer Engineering • Computer Architecture • Digital Design and Interfacing • Electronics
Circuit Analysis • Signals and Systems • Senior Project in Engineering

Computing: Systems Programming • Compiler Design • Database Systems • Data Structures • Software Engineering

Mathematics: Differential Equations • Calculus • 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

Undergraduate Research • Rutgers University

May 2019 - August 2019

- Algorithmically developed 'Graph Stories' by summarizing corpora generated from massive graphs.
- NSF funded individual research applied to graph sensemaking projects currently in development.
- User interface design and testing for ATLAS and Graph Wave projects.

Engineering TA • Elizabethtown College

Jan 2018 - Present

- Educate and assist engineering students with design and fabrication
- Assess student circuits, designs, models, and other work in Computer Engineering and Architecture courses
- Computer Engineering/Science lab assistant and tutor

Freelance Contractor

May 2017 - Present

- Developed and manage a sizeable client base for a variety of notable projects.
- Extensive interior and exterior design and renovation.
- Equipment maintenance and repair for a SERVPRO company.

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 assumptions from user defined data. Otis' development was fully automated with CI/CD and unit testing. Web panel and shell UI.

DiddyBot

Personal Project

- Designed and maintain a scripted Discord bot for my server. Written in JavaScript, running on node.js. MySQL database and several APIs implemented to support over 40 unique commands varying in complexity. Logarithmic user leveling system. Served as a fun project to learn a new language.

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.