

# Kevin Carman

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carmank.github.io/Website

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## Education

**Elizabethtown College**, Elizabethtown, PA

**3.889 GPA** • 2020

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

### Relevant Coursework

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

*Computing:* Systems Programming • Compiler Design • Database Systems • Data Structures • Software Engineering  
Computer Networking • Algorithms • Operating Systems

*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 • Dickinson Programming Competition

## Technical Skills

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

**Software:** Linux/Unix • GitHub • LaTeX • Travis CI • Logisim • Autodesk Eagle • AutoCAD • Inventor • MS Office

**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, code, 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 sizable client base for a variety of notable projects.
- Extensive interior and exterior design and renovation.
- Equipment maintenance and repair for a SERVPRO company.

## Projects

**Cosmic**

Elizabethtown College

- Fully emulated, lightweight, and cross-platform 8-bit computer architecture designed in C++ with a RISC-like instruction set derived from Zilog Z80 and MOS 6502 microprocessors. Rich GUI developed with ImGui for debug/testing. Assembler written in Python. Automated CI/CD and unit testing. Still in development.

**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.