

# Elizabeth Kelmenson

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## Education

**Cornell University, College of Engineering**  
Bachelor of Science in Computer Science  
GPA: 3.72; Cum Laude

Ithaca, NY  
May 2024

**Relevant Courses:** Software Testing, Introduction to Machine Learning, Computer Graphics I, Introduction to Computer Vision

## Experience

### Autonomous Underwater Vehicle Project Team

Fall 2018-Spring 2024

- Led a semester-long project to produce the team's Competition Video (20 hours/week), coordinating the timeline, creative choices, and an 8-student team.
- Developed an interactive 3D model of our vehicle for the CUAUV website using ThreeJS.
- Completed machining certification in the Emerson Machine Shop.
- Executed a strategic leadership plan to revitalize the business subteam, boosting engagement and productivity.

### Course Development, *Deep Learning*

Fall 2023

- Co-created a new class at Cornell University, CS 4782 – Introduction to Deep Learning, developing the module on Attention, Transformers, and Large Language Models.
- Crafted teaching materials including lectures, a coding assignment, and a problem set.

### Teaching Assistant, *Data Structures and Functional Programming*

Fall 2023-Spring 2024

- Instructed a class of 30 students in weekly discussion sections.
- Served as Project Manager for a small group completing a semester-long software engineering project.

## Projects

### Productivity Application

Spring 2020

- Spearheaded development of an 1800 LOC application for schedule management, incorporating sophisticated algorithms for time optimization.
- Architected the project framework, defining features, modules, user interface, and algorithmic solutions.

### Computer Architecture Textbook

Spring 2020

- Authored a comprehensive 50+ page informal textbook elucidating concepts from Embedded Systems, employing original analogies and diagrams.
- Rigorously validated content through peer reviews to ensure clarity and completeness.

### AI Music Generator

Spring 2024

- Developed a system which generates music from a seed melody using an LSTM.

### First Person Game

Fall 2022

- Created a game inspired by Powerwash Simulator, with ray tracing, particle simulation, and environment interaction.

### Pen Stabilization Tool

Fall 2018

- Engineered a 3D printed stabilization tool with Arduino to aid individuals with Parkinson's in writing, drawing, and painting.

## Skills and Interests

**Programming Languages:** Python, Java, C, OCaml, JavaScript, TypeScript

**Skills:** Git, Microsoft Office Suite, Adobe Suite, Blender, Technical Writing, Teaching

**Interests:** Fostering cats, screenwriting, Habitat for Humanity, competitive gaming, cooking