Elizabeth Kelmenson

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Education

Cornell University, College of Engineering Ithaca, NY
Bachelor of Science in Computer Science Expected May 2024
GPA: 3.67; Dean's List

Related Courses: Introduction to Computing using Python, Object-Oriented Programming & Data Structures (Java), Data Structures & Functional Programming, Introduction to Machine Learning, Introduction to Computer Vision, Introduction to Computer Graphics, Software Testing

Experience

Autonomous Underwater Vehicle Project Team Fall 2018-Present

- Completed machining certification in the Emerson Machine Shop.
- Led a project to create the team's Competition Video (20 hrs/week), created and taught a workshop on video editing.
- Implemented the CUAUV website, developing an engaging interactive 3D model of our vehicle using ThreeJS.
- Devised and implemented a strategic leadership plan for the business subteam.

Independent Study, *Deep Learning* Fall 2023

- Co-created CS 4782 – Introduction to Deep Learning, developing the module covering Attention, Transformers, and Large Language Models, to pioneer a new class at Cornell following Introduction to Machine Learning.
- Crafted comprehensive teaching materials including lecture slides, a problem set, and a Jupyter notebook project.

Teaching Assistant, *Data Structures and Functional Programming* Spring 2023-Present

- Instruct and mentor a class of 30 students weekly
- Conduct informative office hours, offering valuable support and clarifications on course material via Ed platform.
- Serve as Project Mentor to a small group completing a semester-long software engineering project

Projects

Productivity Application Spring 2020

- Engineered a sophisticated productivity application that intelligently manages users' schedules (iCal calendars), utilizing advanced algorithms to optimize time management for academic, professional, and team responsibilities.

Computer Architecture Textbook Spring 2020

- Authored a comprehensive 50+ page informal textbook elucidating concepts from ECE 3420 – Embedded Systems, employing original analogies and diagrams. Rigorously tested and validated with peers to ensure clarity and comprehension.

Ray Tracer Fall 2022

First Person Shooter Game Fall 2022

- Designed an immersive game akin to Powerwash Simulator, integrating a particle simulator for water shooting and applying textures to show collisions with the environment.

Pen Stabilization Tool Fall 2018

- Engineered a 3D printed stabilization tool utilizing Arduino technology, aiding individuals with Parkinson's in writing, drawing, and painting with increased stability and precision.

Skills and Interests

Interests: Fostering cats, screenwriting, competitive gaming