Megha Korpol

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EDUCATION

Carnegie Mellon University   May 2025
B.S. in Statistics and Machine Learning
Minor in Computer Science

RELEVANT COURSEWORK

Principles of Imperative Computation	Concepts of Mathematics
Mobile Web Design and Development	Human Robot Interaction
Fundamentals of Programming and Computer Science	Methods for Statistics and Data Science

SKILLS

Software: Python, C++, Java, HTML, CSS, JavaScript, React, Node.js, Express.js, Bootstrap, SQL, R, Tableau
Data Management: analysis, qualitative coding, visualization

EMPLOYMENT

CMU Collective Intelligence Lab   April 2022 – present
Research Assistant
- Develop parsers to automatically organize and filter through data sets (**Python**)
- Create data visualizations for different studies using **Tableau**
- Perform descriptive data analysis and create data documentations to be pushed to **GitHub**

The Coder School   November 2019 – June 2022
Head Teacher
- Taught young students (ages 5-14) how to code in **Python**, **C++**, and **Java**
- Helped students develop basic apps and conducted app reviews
- Created lesson plans for group classes and personalized curriculum for private lessons

PROJECTS/RESEARCH

Non-Profit Organization Web Development Project   October 2022
- Worked with a client (Pittsburgh based non-profit organization) to develop a fully responsive website (**HTML, CSS, JavaScript, Bootstrap**)
- Created lo-fi and hi-fi **wireframes** for each page and screen size [mobile, tablet, desktop] (**Figma**)
- Extensively tested website responsiveness with **Chrome developer tools**

C0VM (Virtual Machine)   May 2022
- Developed a virtual machine for C0 (type-safe programming language similar to C)
- Used **C** to implement stack frames, integer and pointer arithmetic, and memory access for C0VM
- Operates as a stack (similar to JVM) and processes instructions as an array of unsigned bytes
- Can process over 40 instructions, including saving/loading constants, calling errors/assertions, local variables, control flow, native function calls, and memory allocation

Pac Man with A* Path Finding Algorithm   December 2021
- Recreated entire Pac Man arcade game using **Python** (**object oriented-design**, event handling)
- Implemented A* path finding algorithm in each ghost to take the fastest possible path to Pac Man

EXTRACURRICULARS

Carnegie Mellon First Year Orientation	Carnegie Mellon Spring Carnival UX Subcommittee	Activities Board
- Lead a small group of 35-40 first year students through the orientation program - Facilitate conversations on diversity, inclusion, mental health	- Create official Spring Carnival website for Carnegie Mellon (**HTML5, CSS, JavaScript**)	- Plan concerts and social events of up to 500 people for the Carnegie Mellon student body