Wyatt Mayor

wpmayor2@illinois.edu | (309) - 297 - 9051 | github.com/WyattMayor | wyattmayor.github.io

EDUCATION

Bachelor of Arts, Computer Science

May 2023

Monmouth College, Monmouth, IL

(GPA: 3.85/4.00 Scale)

Associates of Arts May 2021

Carl Sandburg College, Galesburg, IL

(GPA: 3.62/4.00 Scale)

EXPERIENCE

CAT Vehicle REU, University of Arizona, Tucson, AZ

(June 2022 - August 2022)

- Worked with state-of-the-art Shadow Detection Deep Neural Networks to detect shadows on road signs
- Developed and implemented a Generative Adversarial Neural Network to remove shadows from images before classification
- Learned how to produce a concise and well-documented research paper to explain what the research entailed

PUBLICATIONS

• Wang, A., Mayor, W., Smith, R., Nookula, G., & Ditzler, G. (2022). Shadows Aren't So Dangerous After All: A Fast and Robust Defense Against Shadow-Based Adversarial Attacks. *arXiv preprint arXiv:2208.09285*.

ACADEMIC PROJECT

The Scot Bot - Senior Project, Monmouth College, Monmouth, IL

- Developed a data scrapping/formatting algorithm that produces a text dataset with annotated question and answers
- Applied a large language model to answer open-domain questions about Monmouth College courses
- Improved my ability to produce visualizations of machine learning models for comparison and explanation

Monocipher, Monmouth College, Monmouth, IL

- Used python to create a command line program that offers encrypting/decrypting, key generation, and letter analysis
- Learned how to handle user inputs and prevent malicious inputs
- Implemented multiple functionalities to the same program preventing confliction

Game of Life Website, Monmouth College, Monmouth, IL

- Experienced web development using HTML, JavaScript, and CSS
- Explored how to dynamically change a website using JavaScript
- Implemented a rule-based system for a dynamic gameboard using JavaScript

RELEVANT COURSEWORK

Monmouth College

- Intro to System Programming –Improved my ability to write and debug c and assembly language
- Discrete Math Developed my understanding of how core math functions work and why they work
- Data Structures and Algorithms Explored fundamental algorithms that can be implemented among foreign programming languages
- Computer Applications(Project course) Developed my ability to work in a software development team and apply foreign programming languages efficiently
- Machine Learning Explored the fundamentals of machine learning and improved my visualization, data analysis, and model implementation ability
- Artificial Intelligence Delved into the fundamentals of Artificial intelligence in topics such as problem formulation, statistics, algorithms, and implementation
- Operating Systems Expanded my understanding of operating systems in topics such as dynamic procedure activation, system structure, memory management, process management, and recovery procedures while also improving my ability to write and debug C code
- SQL Database Application Built and managed a database while learning how to write efficient SQL in MySQL interface (Carl Sandburg College)

TECHNICAL SKILLS

Coding: Python - ★★★★★, C - ★★★★☆, Assembly - ★★★☆☆, C++ - ★★☆☆☆, SQL - ★★★☆☆, HTML - ★★★☆☆, CSS - ★★★☆☆, JavaScript - ★★☆☆, Pytorch - ★★★☆☆, Sklearn - ★★★☆☆, TensorFlow - ★★☆☆

Technologies/Environments: Windows, Mac, Linux, MySQL, Command Line (Mac)