Ashton Thomas

Software Engineer

RELEVANT WORK EXPERIENCE

MadiTaylorPhoto, Traverse City, Michigan, United States Photography Company

Full Stack Developer

06/2021 - 08/2023

- Designed and sustained the corporate website, crafting a cohesive user interface with HTML, CSS, and JavaScript.
- Implemented robust back-end payment solutions and form validation to streamline user transactions.
- Collaborated with a professional photographer to curate high-quality images for marketing campaigns.

MHackers. Ann Arbor, Michigan, United States Full Stack Software Engineering Organization at the University of Michigan

Software Developer - Core Member

08/2020 - Present

- Collaborated with a 3-person team leveraging Python, Keras, and Git to develop machine learning models.
- Engineered a geolocation AI that utilizes panoramas from an API to predict locations, achieving an accuracy rate of approximately 90%.
- Worked with fellow web developers to craft responsive websites using HTML, CSS, and JavaScript.

Projects

Bank Simulator Constructed an online banking infrastructure simulator

capable of parsing input files, managing user operations, detecting fraud, executing priority transactions, calculating fees with 5% loyalty discounts, generating various financial reports, and performing robust error handling.

Geoguessr Al Developed a Geoguessr AI using Keras and TensorFlow to

predict locations from panoramas with a 90% accuracy rate, utilizing grayscale image processing and machine learning algorithms on data sourced from the Mapillary API.

Office Hours API Engineered a high-performance back-end API for the UMich

Office Hours website, leveraging a linked-list data structure to streamline GET, POST, and DELETE requests in an online

queue system.

Web Post Sorter Produced a machine learning program that utilizes naive

Bayes algorithm and leverages binary search trees to classify online web posts by topic, achieving approximately

88% accuracy through recursive methods.

3-D Puzzle Solver Designed a C++ program for solving complex 3-D maze puzzles using DFS and BFS algorithms, with enhanced

features for navigating through buttons, doors, and traps, and the capability to output solutions in list or map format based on getopt_long command line options.

OTHER EXPERIENCE

Software Engineer, SPARK Electric Racing, Ann Arbor, USA Librarian, University of Michigan, Ann Arbor, USA

09/2022 - 11/2022 12/2022 - Present

CONTACT

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- linkedin.com/in/aethom

SKILLS

Technical Skills:

- Software Design
- Web Development
- · Web Services
- Latex
- Git
- Machine Learning

Industry Knowledge:

- Object-Oriented Programming
- · Software Project Management
- · API
- Keras

Tools and Software:

- Python
- · C/C++
- Javascript
- · HTML/CSS

Languages:

- English (Native)
- Spanish (Conversational)
- French (Beginner)

EDUCATION

University of Michigan

Bachelor of Computer Science Engineering Ann Arbor, Michigan 08/2022 - 12/2024 GPA: 3.8 / 4

Northwestern Michigan College

Associates of General Studies Traverse City, Michigan 01/2020 – 05/2022 GPA: 3.96 / 4

OTHER/Certifications

- Advanced Styling with Responsive Design Coursera Certificate
- Python for Everybody Specialization Coursera Certificate