Jotham Teshome

(248)880-1445 | East Lansing, Michigan | jothamteshome@gmail.com | linkedin.com/in/jothamteshome

Education

Michigan State University

Jan 2023 – April 2024

Master of Science, Computer Science

GPA: 3.85

- Coursework: Natural Language Processing, Computer Vision, Pattern Recognition, Deep Learning, Algorithmic Graph Theory, Distributed Systems

Michigan State University

Sep 2019 - Dec 2022

Bachelor of Science, Computer Science

GPA: 3.69

Minor, Business

Experience

MSU College of Engineering

Sep 2023 - April 2024

Graduate Teaching Assistant

- Evaluated assignments to uphold rigorous academic standards in the Web Application Development course
- Provided students with helpful insight on **GitLab** by describing the uses for **HTML**, **CSS**, and **JavaScript** in **front-end** design, including topics such as responsive sizing and dynamic retrieval of data
- Improved students' understanding of **Flask** for **back-end** development by **7%** through hosting regularly scheduled office hour sessions

MSU Federal Credit Union

Sep 2022 - Dec 2022

Software Engineering Intern

- Developed a software project, primarily using **Flutter**, **Dart**, and the **iOS SDK**, for a customer by working with a team of six students to enhance customers' banking experience
- Designed and implemented <u>Digital Transformation of Member Data</u> by working closely with the customer to bring their vision for the product to life

NSF REU Project

Sep 2022 - Dec 2022

Undergraduate Researcher

- Analyzed various research papers to better develop an understanding of optical wireless communication
- Utilized TinkerCAD for 3D modeling to develop a 4 x 4 x 4 3D "QR code" that could be used for groundbreaking research into underwater optical identification
- Developed an Android application written in **Kotlin** to scan a live camera feed, detect objects, and display an associated description of the object on the screen

Projects

Portfolio Website React.js, Bootstrap

May 2024

- Designed a responsive portfolio website to display my experience and projects using **React.js** and **Next.js** to ensure optimal performance and navigation across devices
- Integrated **Bootstrap** for a modern design and utilized **Framer Motion** to create dynamic animations to enhance user experience

Classification of Pokémon Sprites Python, Computer Vision

Sep 2023 – Dec 2023

- Worked with a team of four students to design and implement a convolutional neural network model to successfully classify Pokémon sprites within a set of images
- Leveraged image processing techniques as well as machine learning techniques to classify sprites from battle images with up to **86%** accuracy

Identifying and Removing Toxic Comments Python, NLP

Jan 2023 - April 2023

- Implemented a **recurrent neural network** model trained on labeled comments from the Civil Comments dataset to identify toxicity and non-toxic content online
- Used a multi-step approach, including a secondary **long short-term memory neural network**, to classify words for toxicity within sentences with up to **91%** accuracy

Skills

Programming Languages:
Python, C++, C, JavaScript, Dart

User Interface: HTML, CSS

- **APIs/SDKs/Frameworks**: Flask, Flutter, Node.js, React.js, Bootstrap

· Languages: English (fluent), French (novice)