# CHEN YANG

## 1760 Broadway St, Ann Arbor, MI 48105

**J** 504-387-0806 **☑** <u>shuishui@umich.edu</u> **⊕** <u>https://ssyang8.github.io/</u> **⊖** <u>github.com/ssyang8</u>

#### **EDUCATION**

### University of Michigan

Aug 2022 - Dec 2024

Bachelor of Science in Computer Science

GPA: 3.69/4.00

• Relevant Coursework: User Interface Development, Mobile app development, Software Engineering, Web Systems, Database Management, Data Structures and Algorithms

**Tulane University** 

Aug 2020 - May 2022

Bachelor of Science in Management

GPA: 3.93/4.00

## **EXPERIENCE**

Develop for Good

May 2024 - Present

Engineer

Remote

- Responsible for transitioning Simbi's interactive community service exchange platform from a web application to a cross-platform mobile application, using the **React Native**.
- Developed a user interface that enables users to conveniently browse and search existing service requests. Integrated various filters to help users quickly find service requests that meet their needs.
- Implemented a response system, allowing users to view detailed request information and submit responses, including plans and terms for completing tasks.

#### RESEARCH

University of Michigan

May 2024 - Present

Research Assistant

Remote

- Developed a Chrome extension using LLM to enhance multi-tab information management, enhancing decision-making efficiency and productivity in a web environment, leveraging **React** and **TypeScript** for a dynamic, optimized user interface.
- Integrated **GPT-3.5-turbo** to develop features that allow users to query collected web content directly using the model. During the data collection phase, the extension utilizes the LLM to offer users smart options for refining the data collection process, ensuring more precise and relevant information retrieval.
- Implemented integration with the **Google Sheets API**, supporting a one-click data export feature that facilitates remote access and collaboration among multiple users.

#### University of Michigan

June 2024 - Present

Research Assistant

Remote

- Developed and maintained a Facebook Messenger chatbot specifically designed to provide information on Type 2 diabetes for Black Americans. Built an efficient and stable backend server using **Node.js** and **Express** to handle HTTP requests and responses, and utilized **MongoDB** for data storage and management.
- Acquired geographic location data (latitude and longitude) using the **Zippopotam API** based on user-inputted postal codes, and recommended healthy food restaurants using the **Google Maps API** to help users find healthy food.
- Utilized prompt engineering to create an assistant specifically for answering questions related to Type 2 diabetes using OpenAI's **Assistant API**. Combined this with academic documents uploaded to VectorStores to reduce GPT hallucinations, ensuring accurate and reliable information.

#### **PROJECTS**

#### Pocket Ledger - source code

Jan 2024 - April 2024

- Developed using **SwiftUI** and **Swift**, with the advanced OCR capabilities of the **Apple Vision** framework to enable seamless invoice scanning and accurately capture details from various invoices.
- Integrated the **GPT API**, utilizing the powerful capabilities of GPT-3.5-Turbo-Instruct for precise classification of items extracted from scanned receipts. This advanced feature enhances user experience by automatically categorizing expenses and supports a wide range of financial management tasks.
- Implemented comprehensive **CRUD** operations, allowing users to easily manage their financial data. Users can effortlessly set and track their financial goals within the app and receive insightful monthly reports to monitor their spending habits and progress towards their objectives.
- Integrated the **MobileNetV2** machine learning model for item recognition and used Apple's Speech framework for voice recognition, providing users with a smooth experience for inputting invoice items.

#### SKILLS

Languages: C++, Python, SQL, JavaScript, Swift

Frameworks/Cloud/Libraries/Tools: Django, Flask, React, REST, AWS, MongoDB, Express, Vue, React Native, Node