DAVID CHEN

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EDUCATION

EMORY UNIVERSITY Atlanta, GA

Bachelor of Science Expected May 2026

Major in Computer Science and Mathematics; Minor in Quantitative Science

Cumulative GPA: 4.0/4.0; Dean's List 2022 Fall, 2023 Spring

Relevant Coursework: Data Structures & Algorithms; Operating Systems; Assembly Programming; Google Cloud Foundations; Database Systems; Data Mining; Intro to Artificial Intelligence; Linear Algebra

EXPERIENCE

CURASTONE Sep 2023 - Dec 2023

Frontend Developer Intern

- Developed an AI-learning assistant that generates flashcards and personalized exercises using TypeScript and Next.js
- Implemented user authentication, file upload, and course management, integrated with backend API using RTK Query
- Designed responsive webpages using Tailwind CSS to ensure proper display of elements on various screen sizes
- Deployed application using Vercel and AWS Route 53 and documented the process for future reference

EMORY DATA SCIENCE CLUB

Oct 2022 - May 2023

Project Lead

- Directed a project focused on analyzing the relationships between mental health metrics, COVID-19, and economic indicators
- Orchestrated the cleaning and integration of raw datasets, building a multi-dimensional time-series data frame for analysis
- Successfully built high-performing XGBoost models that predict mental health metrics with low error rates

DIGITAL LANDSLIDE ARCHIVE PLATFORM

Sep 2023 – Oct 2023

Research Assistant

- Contributed to the development of a platform for analyzing and managing of whole-slide pathology imaging data
- Built a Python Dash Component using React Clover IIIF library, incorporated features like zooming and slideshow

VIBE STUDENT STORE Sep 2018 – May 2022

Chief Finance Officer

- Directed a 5-member team to manage and analyze transaction records using Square Business Banking and Wave Financial
- Made monthly financial reports and delivered valuable suggestions for purchase and design decisions regarding products

TECHNICAL PROJECTS

E-COMMERCE WEBSITE (GitHub | Website)

JavaScript, React, Google Cloud Firebase

- Developed a full-stack online shopping site featuring product display, item search, shopping cart, and checkout functionalities
- Implemented props sharing and global state management with React Context API
- Integrated frontend server with Firebase, enabling user authentication and secure storage of user data

NEURAL NETWORK FOR MPOX DIAGNOSIS (GitHub | Website)

Python, Django, Sklearn, Tensorflow

- Trained a neural network utilizing data from 25,000 patients exhibiting symptoms of MPox to develop a recommendation system for predicting whether an MPox test is necessary
- Conducted data preprocessing by replacing missing data, standardizing binary values, and implementing OneHotEncoding
- Implemented and tuned a neural network architecture with 4 layers, achieving a notable accuracy of 68% in diagnosing MPox

ONLINE TASK MANAGER (GitHub | Website)

Python, Django, SQLite

- Engineered an efficient online to-do-list system capable of recording and tracking the completion status of tasks
- Designed APIs based on CRUD operations to support task addition, deletion, and editing
- Leveraged the Django authentication system to store user information and encrypt passwords with SHA256 hash

SKILLS

| Programming Languages | | | <u>Frameworks</u> | | | Other Technologic | Other Technologies | |
|-----------------------|----------|------------|-------------------|-----------|----------------|--------------------|--------------------|--|
| - JavaScript | - Python | - Java | - React.js | - Node.js | - Tailwind CSS | - Google Cloud | - AWS | |
| - TypeScript | - C/C+- | + - SQL | - Redux.js | - Sklearn | - Spring Boot | - MongoDB | - Postman | |
| - Swift | - R | - HTML/CSS | - Next.js | - Django | - Tensorflow | - Microsoft Office | - Linux | |