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; Computer Architecture & Assembler Programming; Google Cloud Foundations; Linear Algebra; Intro to Computer Science; Intro to Artificial Intelligence

TECHNICAL PROJECTS

REACT JS ECOMMERCE WEBSITE (GitHub | Website)

JavaScript, React, Firebase

- Built a full-stack e-commerce site with product display, item search, shopping cart, and checkout
- Enabled props sharing and global state management with React Context API
- Integrated server with Firebase to enable user authentication and storage of user data
- Implemented Firestore security rules to check user authentication status and ensure safe CRUD operations

DJANGO ONLINE TASK MANAGER (GitHub | Website)

Python, Django, SQLite

- Built an online to-do-list that can record and track the completion status of tasks
- Designed Rest APIs based on CRUD operations to support adding, deleting, and editing of tasks
- Utilized Django authentication system to store user information and encrypt passwords with SHA256 hash

GCLOUD TRANSLATION API PROJECT (GitHub)

Python, Pandas, Google Cloud

- Investigated how factors such as language and content type impact the accuracy of Google Cloud Translation API
- Utilized TfidfVectorizor to compute cosine similarity scores measuring how well text meaning is preserved through translation
- Identified text content type and rounds of translation to be correlated with translation accuracy

IOS GAME: A WORDLE CLONE (GitHub)

Swift, SwiftUI, XCode

- Developed an iOS version of Wordle with add-ons including a hard mode and synched statistics
- Implemented game functionalities including keyboard, color flips, and word verification
- Applied scaling techniques to accommodate iPhones and iPads of various sizes

EXPERIENCE

DIGITAL LANDSLIDE ARCHIVE PLATFORM

Aug 2023 - Present

Research Assistant

- Supported the development of a platform that analyzes and manages whole-slide pathology imaging data
- Built a Python Dash Component to enable the effective display of high-resolute IFFF images with zooming and slideshow

EMORY DATA SCIENCE CLUB

Oct 2022 - May 2023

Project Lead

- Led a project to analyze the relationships between mental health metrics, COVID-19, and economic indicators
- Cleaned and merged economic indicators, mental health, and Covid-19 data from CDC, BEA, and NYT databases
- Built XGBoost machine learning models with low error rates (Mean Squared Error on training/validation data = 3.98/9.29)

VIBE STUDENT STORE

Sep 2018 – May 2022

Chief Finance Officer

- Led a team of 5 members to manage and analyze transaction records using Square Business Banking and Wave Financial
- Made monthly financial records and provide suggestions for design decisions on school apparel and souvenirs
- Organized weekly meetings to offer performance feedback and assign tasks

SKILLS

Programming Languages			<u>Frameworks</u>		Other Technologies	
- JavaScript	- Python	- Java	- Express.js	- Node.js	- Microsoft Office	- Linux
- C++	- C	- SQL	- React	- Django	- Google Cloud	- Firebase
- HTML	- CSS	- Swift	- Spring Boot	- Vue	- MongoDB	