Zachary Cheng

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EDUCATION

Emory University Atlanta, GA

B.S. Computer Science and B.S. Quantitative Sciences – Data Science Concentration 3.94/4.00 GPA

May 2025

Relevant Courses: Artificial Intelligence, Machine Learning, Database Systems, Data Structures and Algorithms, Computer Architecture, Systems Programming, Physical Computing, Statistical Computing

EXPERIENCE

Oracle Cerner Kansas City, MO

Software Engineer Intern

June 2022 – August 2022

- Developed RESTful API web services with Ruby on Rails and React.js for a new medical web application
- Implemented error handling/logging to streamline debugging and tested functionality with RSpec and Jenkins
- Optimized initial RDBMS schema designs and MySQL queries to ensure scalability for an estimated 650K+ users
- Uplifted and monitored features for 5 other projects such as outdated dependencies and failed integration builds

T-Mobile Overland Park, KS

Business Analyst Intern

May 2023 – August 2023

- Led a region-wide vehicle consolidation initiative resulting in 60 fewer vehicles and \$1.2M in recovered capital
- Enforced a weekly pace for compliance metrics across 23 markets, achieving a nation-leading 99% compliance rate
- Developed a Power BI dashboard to automate data collection and reporting using SQL Server and Power Automate

Emory Department of Quantitative Theory & Methods

Atlanta, GA

Research Assistant

August 2023 – Present

- Fetched thousands of data points using APIs and web scraping techniques for an upcoming database publication
- Integrated AWS Lambda into the process to bypass API rate limits and improve efficiency from weeks to days
- Extracted key information from raw text using NLP text analysis techniques to reduce file sizes by over 50%

Project V Solutions Consulting

Atlanta, GA

Project Lead – B2C Lifestyle store, past Analyst – Music royalty company

February 2022 – *April* 2023

- Oversaw a team of 8 during weekly meetings and led bi-weekly client meetings to present deliverables
- Proposed workplace structure changes alongside incentives and division specific KPIs to ensure successful integration
- Delivered data-driven social media marketing strategies for various market segments to facilitate a campaign launch

PROJECTS

KeyTake | AI Group Chat Assistant

GitHub Repository

Languages/Tools - OpenAI API, MongoDB, Flask, Python, JavaScript, HTML, CSS

- Full-stack web application integrating GroupMe and OpenAI APIs to summarize messages and highlight action items
- Built a 90% accurate classifier by cross-validating possible action items with scikit-learn machine learning models
- Utilized MongoDB for flexible storage and efficient retrieval of various media types to be used by the frontend

GradU | Graduate School Application Resource Forum

GitHub Repository

Languages/Tools – Google Cloud Platform, React.js, Flask, Python, PostgreSQL

- Full-stack web application forum for users to share, search, and save graduate school application materials
- Incorporated Flask for profile creation and PostgreSQL for content filtering, ensuring secure data transmission
- Simulated an Agile workflow and launched to 50+ Emory students to foster personal learning

Spotify Trends and Notes

GitHub Repository

Languages/Tools - Spotify API, Node.js, JavaScript, HTML, CSS

- Developed features for users to view their listening trends, add notes to songs, and share notes alongside playlists
- Implemented secure OAuth user authentication and session cookies with Express.js for a seamless login experience

ADDITIONAL SKILLS AND INTERESTS

Programming Languages: Java, Python, C, SQL, HTML, CSS, JavaScript

Tools and Frameworks: AWS, Flask, MongoDB, React.js, Node.js, Docker, Jenkins, Selenium, JDBC, Microsoft Office **Extracurriculars**: Undergraduate TA, Club Baseball, Kappa Sigma Fraternity, Emory Startups, Hackathons

Interests: Fishing, Baseball, Robotics, Golf, Electronic Dance Music, Aircraft Piloting, Pokémon GO