

# Chau Nguyen

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## EDUCATION

University of South Florida | Tampa, FL

Jan 2024 - May 2025

M.S. in Computer Science, Specialization in Machine Learning

GPA: 4.00/4.00

Coursework: Intro to AI, Deep Learning, Computer Vision, Image Processing, Data Structures, Algorithms, Graph Theory

University of South Florida | Tampa, FL

Aug 2020 - Dec 2023

B.S. in Computer Science, Minor in Mathematics

GPA: 4.00/4.00

## EXPERIENCE

Software Developer Intern | Taperk | New York, NY

Sep 2023 - Dec 2023

- Developed the front end for iOS full and instant apps using **Swift**, enabling customers to accumulate points and redeem rewards at stores with a simple tap via **NFC** tags. Utilized backend APIs to fetch and process **JSON** data.
- Improved app response times by **40%** by incorporating persistent data storage for unique identifiers.
- Reduced the instant app size by **52%** by refactoring the codebase and optimizing external libraries and media assets.
- Conducted critical bug analysis by implementing unit testing, resulting in a **70%** increase in app performance.
- Managed the app development using **Git** version control and deployed it on TestFlight for organizational distribution.

Undergraduate Research Assistant | USF | Tampa, FL

Jan 2023 - May 2023

- Collaborated with a team of 3 to fine-tune **GPT-3.5** models using **OpenAI** to generate questions about user dietary intake, extract keywords from dietary conversations, and create personalized nutrition data visualization dashboards.
- Built a cross-platform application (iOS, Android, web) using **Flutter** with chatbox and voice-assistant interfaces.
- Configured **MySQL** database server and performed query optimization, enhancing data retrieval efficiency by **65%**.

## PROJECTS

Personal Website: [www.minhchau.me](http://www.minhchau.me) (for additional information and project details)

EmotiSounds | Brain-Computer Interface Project

Oct 2023 - Dec 2023

- Developed a personalized music-recommendation website based on user mood using **MongoDB**, **Express.js**, **Angular**, and **Node.js**. Created a visualized dashboard of user emotions to analyze the mood-modulation effect.
- Built a real-time emotion detection CNN via facial expression with a **94%** accuracy using **OpenCV** and **Tensorflow**.
- Designed a case-based reasoning system to improve user affective state with a personalized playlist via **Spotify API**.

Em-net | USF Hack-a-Bull | 1<sup>st</sup> Place for CockroachDB Serverless Challenge

Mar 2023

- Developed an iOS app utilizing **Solana** blockchain technology to incentivize user engagement at campus events.
- Designed backend schema with **SQL** database **CockroachDB** and created **REST APIs** with **Flask-SQLAlchemy**.
- Utilized **Selenium** to automate real-time web scraping of **1,500+** USF campus events and updating the database.
- Incorporated a pre-trained **NLP** model, **DistilRoBERTa**, to classify user emotions via event feedback journaling.

Rebye | Full-Stack Database Design Project

May 2022 - July 2022

- Developed a C2C e-commerce mobile app with **Swift** and **Objective-C** for users to sell and buy items seamlessly.
- Optimized CRUD operations on **SQLite3**, reducing load times by **68%** by caching the most recently viewed items.
- Implemented user login authentication with **Firebase** and expedited secure payment transactions with **Stripe**.

Remind Me | USF Hack-a-Bull Award-Winning Project

Mar 2022

- Built a Chrome extension utilizing **React.js**, **TypeScript**, and **LocalStorage** to notify users of to-do tasks.
- Delivered a user-friendly and responsive web design for the to-do list reminder using **HTML/CSS** and **Material UI**.
- Led a team of 4 to improve web performance by **30%** by optimizing code through exceptional communication skills.

## LEADERSHIP EXPERIENCE

Treasurer and Web Master | Association for Computing Machinery (ACM) | USF

Aug 2021 - May 2023

- Allocated funds for **500+** members for on-campus events, tech workshops with industry companies, and conferences.
- Devised and executed a marketing strategy with 3 other chair members through social media platforms and in-person campaigns, which fostered **200+** new member registrations and a **40%** increase in participation rate.

## TECHNICAL SKILLS

Programming Languages: Python, C, C++, Swift, Objective-C, HTML, CSS, SQL, NoSQL, Java, Javascript, TypeScript

Software Tools/Frameworks: Git, React.js, Next.js, PostgreSQL, MySQL, AWS, GCP, Pytorch, Tensorflow, Flutter, Flask