Chau Nguyen

J 813-367-6834 **☑** chaunguyen3@usf.edu **☐** linkedin.com/in/ctrbl **☐** github.com/ctrbl **⊕** www.minhchau.me

EDUCATION

University of South Florida — Tampa, FL

Jan 2024 – May 2025

Master of Science in Computer Science, Specialization in Machine Learning

GPA: 4.00/4.00

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

University of South Florida — Tampa, FL

Aug 2020 – Dec 2023

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 4.00/4.00

EXPERIENCE

Software Engineer Intern | Taperk — New York, NY

Sep 2023 – Dec 2023

- Developed the UI/UX for the iOS full-stack system using **SwiftUI** for users to accumulate points and redeem rewards at stores via **NFC** tags. Utilized **HTTP**-based backend APIs to successfully retrieve and process **JSON** data.
- Improved app response times by 40% by incorporating persistent data storage for unique identifiers with Core Data.
- Reduced the app size by 52% by refactoring the codebase and using design patterns to optimize UI components.
- Implemented unit tests and end-to-end tests with **XCTest**, resulting in a 70% improvement in app performance.
- Utilized Git for effective version control, GitLab for CI/CD, and TestFlight deployment for cross-functional testing.

Undergraduate Research Assistant | University of South Florida — 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 and create **Tableau** data visualization dashboards by extracting **170,000+** entries from the USDA database.
- Built a cross-platform application (iOS, Android) using **React Native** with chatbot and voice-assistant interfaces.
- Configured MySQL database server and performed query optimization, enhancing data retrieval efficiency by 65%.

Projects (Portfolio Website: www.minhchau.me)

EmotiSounds | Full Stack Web Development Project

- Developed a personalized music-recommendation website utilizing MongoDB, Express, Angular, and Node.js.
- Built a CNN model for real-time facial emotion recognition with a 94% accuracy using OpenCV and Tensorflow.
- Formulated a case-based reasoning algorithm to enhance user affective state with curated playlists via **Spotify API**.
- Utilized Java to develop and optimize backend functionalities for efficient data management and caching strategies.

Remind Me | USF Hackathon Award-Winning Project

- Coded a Chrome extension web application using **React.js**, **TypeScript**, and **LocalStorage** to notify users of tasks.
- Delivered a user-friendly, responsive front-end design to boost user productivity with HTML, CSS and Material UI.
- Led a team of 4 with exceptional communication skills to improve web performance by 30% by optimizing code.

$\mathbf{Em\text{-}net} \ | \ \textit{USF Hackathon Winner of CockroachDB Serverless Challenge}$

- Developed an iOS app using SwiftUI and Solana blockchain to incentivize user engagement at USF campus events.
- Created SQL database schema in CockroachDB and REST APIs via Flask-SQLAlchemy for system integration.
- 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 Mobile Development Project

- Developed a C2C e-commerce mobile app with **SwiftUI** 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 using **OAuth 2.0** and secure end-to-end payment transactions with **Stripe**.

Leadership Experience

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

Aug 2021 - Aug 2023

- Generated \$6,000+ in funds supporting on-campus events, tech workshops, and conferences for 500+ members.
- Devised and executed a digital 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

Languages: Python, C, C++, C#, HTML, CSS, SQL, NoSQL, Java, Javascript, TypeScript, Swift, Objective-C, Dart Frameworks: React, React Native, Angular, Vue, Express, Node, Next.js, MongoDB, PostgreSQL, MySQL, AWS, Pytest Tools/Operating Systems: Git, GitHub, VS Code, Jenkins, Docker, Kubernetes, Jira, Agile Methodologies, Linux, Unix