

AMIT TZADOK

Chappaqua, NY • amit.tzadok@icloud.com • github.com/amit-tzadok • linkedin.com/in/amit-tzadok • amit-tzadok.github.io/Amit/

EDUCATION

University at Buffalo, The State University of New York, Buffalo, NY

Bachelor of Science: Computer Science, Minor in Mathematics

August 2021- May 2025

Relevant Courses: Algorithms, Data Structures, Machine Learning, Web Development, Computer Organization, Software Engineering, iOS Development

PROJECTS

Our Space- React, Firebase, JavaScript

Spring 2026

- Built a production React app with real-time Firebase Firestore, Cloud Functions, and FCM push notifications across 15+ event types, deployed cross-platform to web, iOS, and Android via Capacitor.
- Designed a multi-tenant architecture supporting multiple relationship spaces per user, with per-user settings, Firestore security rules enforcing data isolation, and field-level access control.
- Integrated Anthropic Claude API for AI-generated features and built an activity feed with timestamp normalization, deduplication, and real-time unread badge tracking.

ML Visualizer - React, TypeScript, Vite, TensorFlow.js

Fall 2025

- Built an interactive web application to visualize machine learning classifiers, including KNN, linear and polynomial perceptrons, and MLPs.
- Integrated a chatbot to provide users with contextual explanations and guidance about algorithms and visualizations.
- Designed a responsive UI to simplify complex ML concepts for learners.

Digit Recognition and Classification - Python, TensorFlow, MNIST Dataset

November 2024

- Built and optimized a multilayer perceptron (MLP), achieving 99.31% classification accuracy on MNIST.
- Performed data normalization, visualized predictions, and refined the model using confusion matrices.

“Explore” iOS Application - Swift, UIKit, Parse Server, Postman

Spring 2022

- Contributed to the development of an iOS app using Parse RESTful APIs that lets students post, view, and save campus locations.
- Integrated MapKit and tested API behavior using Postman.

LEADERSHIP & COMMUNITY INVOLVEMENT

Treasurer | Association for Computing Machinery (ACM) | University at Buffalo

October 2021 - May 2025

- Managed and executed a \$7,000 annual budget, overseeing activity spending for events averaging 80+ attendees.
- Coordinated fundraising initiatives and organized technical workshops and hackathons.

Technical SKILLS

Programming Languages: Python, C, JavaScript, Scala, Swift

Frameworks & Tools: React, Node.js, TensorFlow.js, Git, Xcode, Godot, Vite, Flask, VSCode, IntelliJ, Figma, Photoshop, Excel