# Nicholas Le

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#### EDUCATION

#### University of California, San Diego

B.S. in Computer Engineering - 3.8 GPA

Aug. 2024 – June 2027 San Diego, CA

#### Work Experience

# Software Engineering Intern

June 2025 - Present

Health1st.ai — WinFully on Technologies Alpharetta, GA (Remote)

- Developed a distributed microservices platform for healthcare interoperability, implementing FastAPI services that support HL7, FHIR, and X12 data standards and enable seamless integration across provider systems.
- Built real-time multimodal AI workflows by streaming audio to a low-latency Whisper STT pipeline, enabling live transcription, conversational commands, and context-aware agent responses within healthcare applications.
- Integrated LangChain and Model Context Protocol (MCP) to power intelligent field mapping, record lookups, and workflow orchestration through declarative AI tool interfaces.
- Designed an event-driven backend using asynchronous FastAPI, PostgreSQL, and Redis caching, with containerized deployments on Docker and Cloud Run for scalable and fault-tolerant execution.

## Lead Developer and Assistant Instructor

Mar. 2022 - Feb. 2024

Goose Creek Golf Academy

Jurupa Valley, CA

- Deployed an iOS app in SwiftUI that authenticates users via Firebase Auth, fetches swing metrics stored in Firestore, and displays interactive charts to track performance trends and reduce manual data lookup.
- Leveraged Trackman launch monitor and wearable sensor analytics to deliver biomechanical insights, improving student swing consistency.
- Designed and maintained a performance tracking database, generating weekly progress reports and actionable coaching plans.

#### Projects

RoboSub Team Website | React, JavaScript, HTML/CSS, MongoDB, Figma, Git

Jan. 2025 – Present

- Building a full-stack platform for UCSD RoboSub with dynamic content management, user authentication, and role-based access control
- Designed high-fidelity Figma prototypes and implemented pixel-perfect React components for responsive UI across devices
- Architected RESTful API endpoints using Express.js and MongoDB to serve real-time project logs, event calendars, and member directories
- Implemented CI/CD pipelines via GitHub Actions for automated testing, linting, and deployment to Netlify, halving release cycles

# Date Tracker iOS App | Swift, SwiftUI, Firebase Firestore

Mar. 2025 - Apr. 2025

- Engineered an offline-capable Firestore data layer with real-time conflict resolution, so paired users always see each other's updates instantly.
- Built custom SwiftUI calendar & timeline components with adaptive light/dark themes and subtle haptic cues for a more immersive feel.
- Streamlined user onboarding with one-tap pairing via Firebase Auth & Dynamic Links, handling invites, permissions, and edge-case errors gracefully.
- Powered dynamic Lock-Screen widgets and in-app reminders using Firebase Cloud Messaging + Cloud Functions

## Hookpoint Collaboration - Video Game | Unity, C#, Git

Aug. 2023 – Mar. 2024

- Developed a dynamic hooking mechanic with C# coroutines and physics joints, enabling realistic object interactions under varying conditions
- Optimized NavMesh generation and custom A\* heuristics to improve AI pathfinding efficiency
- Coordinated iterative playtesting sessions, gathered user feedback, and refined gameplay balance and UI elements accordingly

### Skills and Coursework

Languages: Java, C, JavaScript, Typescript HTML/CSS, Swift, Python, Bash

Frameworks/Libraries: React, Node.js, SwiftUI, MongoDB, Firebase

Certifications: Pearson IT Specialist, IC3 Digital Literacy, FCC Responsive Web Design, Social Media for Business Relevant Courses: Accelerated Intro to Programming (CSE 11), Data Structures & OOP (CSE 12), Discrete Mathematics—proofs & combinatorics (CSE 20), Systems Programming & Tools (CSE 29), Computer Organization & Architecture (CSE 30)