Krish Patel

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Education

University of North Carolina at Chapel Hill May 2026
B.S. Computer Science, Minor Data Science *Current GPA: 3.86*
Courses: Data Structures & Analysis, Modern Web Programming, Files & Databases, Algorithms & Analysis, Internet Services & Protocols, Cryptography, Digital Logic & Computer Design, Foundations of Software Engineering, Computer Organization, Systems Fundamentals, Distributed Systems, Mobile Computing Systems

Skills

Languages: Python, C++, C, JavaScript/TypeScript, Go, Swift, SQL, SystemVerilog, Java, HTML/CSS, LaTeX
Frontend & Mobile: React, Next.js, SvelteKit, Angular, TailwindCSS, SwiftUI
Backend, Cloud, & DevOps: AWS, Supabase, Vercel, Git, Docker, PostgreSQL, SQLite, Flask, FastAPI, Express
ML & Data: PyTorch, Core ML, NumPy, Pandas, Tableau

Experience

Fidelity Investments | *Incoming Software Engineering Intern* June 2025 – Aug. 2025

Competitive Programming Club | *Mentor* Sept. 2024 – Present
- Guided students through problem-solving strategies and common patterns during weekly meetings
- Collaborated with teammates on timed problem sets to prepare for regional competitive programming competitions

Carolina Web Dev Club | *Software Engineer* Aug. 2023 – May. 2024
- Built and maintained web apps for internal tools and club showcases using React and Supabase
- Organized and led a series of React and web dev workshops for new club members

Projects

Audionaut | *SwiftUI, Core ML, AWS Lambda, S3, Amazon Transcribe*
- Developed a iOS app for recording, importing, and managing transcription, using Core ML-optimized Whisper models for on-device processing and Amazon Transcribe for accurate cloud transcription
- Enabled real-time sync and scalable audio storage via AWS Lambda and S3, and integrated AI services like OpenAI and Gemini for smart summarization and content analysis

Neural Network From Scratch | *C++*
- Engineered a feedforward neural network in C++ without external libraries, implementing forward propagation, backpropagation, and SGD at a low level
- Trained and evaluated model on a seeds dataset using a 5-fold cross-validation pipeline, achieving ∼94% accuracy

UNC CSXL Admin | *TypeScript, Angular, Python, FastAPI, PostgreSQL*
- Built a fullstack admin dashboard to manage lab schedules, office hours, and employee availability, used by the CSXL co-working space
- Designed and consumed RESTful APIs with FastAPI and PostgreSQL, connecting them to a responsive Angular UI for real-time tracking, event coordination, and streamlined workflows
- Led Agile sprints, code reviews, and cross-team collaboration to deliver production-quality features on schedule

PeerBeam | *Go, SvelteKit, TypeScript, WebRTC*
- Built a peer-to-peer file transfer web and CLI app that avoids relay servers, enabling direct connections for faster and more private transfers
- Tuned WebRTC parameters to improve transfer speeds and reliability across different networks and browsers
- Implemented QR-based connection setup for seamless peer discovery without centralized coordination

Chrome Dino on FPGA | *SystemVerilog, MIPS Assembly, Vivado*
- Built the Chrome Dinosaur Game on an FPGA by designing a full MIPS computer, including a CPU, accelerometer, keyboard, display, and sound I/O
- Programmed game logic in assembly and designed hardware components in SystemVerilog, integrating everything in Vivado