

ANISH PATEL

(336) 989-8785 | github.com/AnishPatel526 | abpatel1@unc.edu | linkedin.com/in/anish-patel1 | anishpatel.xyz

Education

University of North Carolina at Chapel Hill

Chapel Hill, NC

B.S. Computer Science, B.S. Statistics and Analytics

Aug 2024 - May 2028

- **GPA: 3.7 / 4.0**
- **Relevant Coursework:** Algorithms and Analysis, Introduction to Machine Learning, Computer Organization, Data Structures and Algorithms, Object-Oriented Programming, Systems Fundamentals, Discrete Mathematics
- **Clubs/Activities:** Kappa Theta Pi, UNC CS Peer Mentor, CS + Social Good, Climbing Club

Experience

Undergraduate Teaching Assistant, COMP 311: Computer Organization

August 2026 – Present

University of North Carolina at Chapel Hill

Chapel Hill, NC

- Hold office hours and help students debug RISC-V assembly by tracing register, memory, and control-flow behavior to identify logic errors.
- Grade assignments and reinforce computer organization concepts including datapaths, pipelining, caching, number representation, memory systems, and control logic.

Application Development Intern

May 2026 – August 2026

apexanalytix

Greensboro, NC

- Automated regression testing across 5 Fortune 500 client portals using **Python** and **Playwright**, cutting a 2-hour manual cycle to **17 minutes** and standardizing testing for 200+ employees.
- Consolidated client-specific test logic into a configuration-driven framework that adapted to page layouts and authentication flows across 5 Fortune 500 portals.
- Automated QA account provisioning with **Python** and **SQL Server** by reproducing the application's credential-hashing logic, eliminating email-based account resets during testing.
- Hardened the test suite against asynchronous page updates, blocking dialogs, and dropped sessions, enabling reliable unattended execution on every pull request through **GitHub Actions**.

Software Engineering Intern

June 2025 – August 2025

Sports Media Inc.

Remote

- Designed and shipped a token-based authentication service in **Python** and **Java** integrated with the platform database, improving login success rate by **30%** across a **5,000-user** platform.
- Cut page-load latency by **1.2 seconds** by eliminating redundant client-server API calls and optimizing frontend rendering and responsive UI behavior.

Research Intern

August 2023 – May 2024

North Carolina A&T State University

Greensboro, NC

- Co-authored a **peer-reviewed publication** on machine learning for automotive CAN bus security and presented the findings at the 2024 icABCD Conference.
- Implemented and benchmarked four ML classifiers in **Python** and **scikit-learn**, achieving **95%+ accuracy** in detecting CAN bus cyberattacks.
- Built a reproducible preprocessing and validation pipeline for raw automotive sensor data using feature engineering and cross-validation.

Projects

SideLine | *React, Node.js, WebSockets, Python, PostgreSQL*

GitHub Repository

- Engineered a real-time analytics dashboard integrating 3+ **WebSocket APIs**, with automatic reconnection and backfill handling for interrupted live data feeds.
- Built a **Python** and **PostgreSQL** ML pipeline that engineered leakage-safe player features across **1,200+ games** and trained four calibrated **XGBoost** classifiers using time-ordered validation.
- Developed a scheduled ML screener that joins player features with live sportsbook odds, converts market odds to implied probabilities, and surfaces **4%+ model-to-market probability gaps** through a filterable **Express API**.

Praxis | *React, Node.js, Express, Google Vertex AI, GitLab API, Slack, Pinecone*

GitHub Repository

- Engineered an incident-response pipeline using **Gemini 2.5** on **Google Vertex AI** to analyze application logs, generate code fixes, and evaluate patches with security, cost, and architecture critics.
- Integrated **Slack** and **GitLab APIs** so engineers can approve proposed fixes, automatically creating a branch, committing the patch, and opening a merge request for review.

Technical Skills

Languages: Python, Java, C++, C, JavaScript, TypeScript, SQL, HTML/CSS

Frameworks & Libraries: React, Node.js, Express.js, Flask, Playwright, Pandas, scikit-learn, XGBoost

Databases & APIs: PostgreSQL, SQL Server, Pinecone, REST APIs, WebSockets

Cloud & Tools: AWS, Google Vertex AI, Docker, Git/GitHub, GitHub Actions, GitLab, Unix/Linux