

# Nilkanth Patel

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## EDUCATION

### Rutgers University

New Brunswick, NJ

*B.E. Computer Engineering | GPA: 3.5/4.0*

*Expected: May 2028*

- **Relevant Coursework:** Object-Oriented Programming, Integrated Data-Driven Design for Engineering Applications, Data Structures & Algorithms
- **Awards:** Dean's List, James and Edna Noe Endowed Scholarship

## TECHNICAL SKILLS

**Data & Analysis:** Python, SQL, PostgreSQL, Pandas, NumPy, Empirical Data Analysis

**Dashboards & Visualization:** Microsoft Excel (XLOOKUP, VLOOKUP, PivotTables, Power Query), Power BI, Tableau, Matplotlib, Microsoft Office Suite

**Languages & Tools:** HTML, CSS, JavaScript, MATLAB, Next.js, REST APIs, VS Code, Git, GitHub, Vercel, AI, Claude Code

## WORK EXPERIENCE

### Code Ninjas

Marlton, NJ

*Center Director*

*March 2026 – Present*

- Directed daily operations of a dojo running **8–10 class blocks per week** across 4 days, managing a team of **4–7 Senseis** staffed to maintain a **7:1 student-to-instructor ratio**.
- Oversaw a roster of **75–110 enrolled students**, driving retention and new sign-ups by building parent relationships and converting trial-session inquiries into long-term enrollments.

*Coding Sensei (Instructor)*

*October 2025 – March 2026*

- Taught coding and STEM concepts to children through Code Ninjas' **CREATE** curriculum, instructing block-based coding (**Microsoft MakeCode**) through **JavaScript**, and **GDScript (Godot)** as students advanced through belts.
- Sustained student motivation and progress by creating an engaging dojo environment and delivering constructive feedback across sessions, camps, and workshops.

### NJIT STEMx Applied Engineering Technology Program

Newark, NJ

*Engineering Intern*

*July 2024*

- Completed a hands-on technology internship applying **rapid prototyping, robotics, and electronics** to solve real-world design challenges in a fast-paced, cross-functional environment.
- Cut design iteration time from **2 weeks to 5 days** by systematizing rapid prototyping workflows across 3D printing, laser cutting, and robotics, delivering 3 production-ready prototypes.
- Presented **3 CAD-modeled prototypes** to **30+ peers and mentors**, translating technical concepts into clear, professional communications for mixed technical/non-technical audiences.

## PROJECTS

### Flight Delay & Airline Performance Analysis | *Python, PostgreSQL, SQL, Tableau*

March 2026 – April 2026

- Ran an end-to-end operational analytics project on **5.2M+ U.S. flights** using FAA-aligned Bureau of Transportation Statistics data to surface airline performance and delay-driver insights.
- Authored **8 SQL queries** (window functions, CTEs, multi-table joins) against a normalized **4-table** PostgreSQL schema to extract clean carrier **KPIs** and delay drivers.
- Uncovered that **Late Aircraft delays** drove **41.2%** of all disruptions and **DFW** averaged a **23.7-min** departure delay—the worst among major hubs—informing real-time traffic-flow decisions.
- Published a **3-page interactive Tableau dashboard** with live API integration (AviationStack, OpenSky Network), enabling real-time and predictive monitoring of carrier performance.

### Spotify Personality | *Next.js, Spotify API, NextAuth.js, Vercel*

April 2026 – May 2026

- Architected and shipped a **full-stack web app** end-to-end, following core **SDLC** practices from requirements through production deployment.
- Implemented secure **OAuth 2.0** authentication, applying change-management discipline to safely manage credentials across dev/prod environments.
- Deployed to **Vercel** via **GitHub Actions** on main-branch merges, onboarding **10+ active users**; tested **OAuth flows** and **API routes** end-to-end before production release, achieving full ownership of a production-ready product.

## OTHER

**Languages:** English, Gujarati

**Interests:** Basketball, Music, Traveling