Neel J. Patel

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Education

Purdue University

Bachelor of Science in Computer Engineering

- Pursuing Minors in Computer Science and Computer Information Technology
- GPA: 3.43 / 4.00 • Relevant Coursework: Data Structures & Algorithms, Object-Oriented Design with C++, Python & Data Science, Computer Security & Cryptography, Computer Architecture, Game Theory, DAQ And Systems Control

Experience

MiraPhoto

Software Engineer Intern

- Delivered full booking & review flow in **React Native** + **Expo** (25 reusable **TypeScript** components, RTK Ouery, image lazy-load), cutting first-paint to 1.1s and onboarding 3k users in the first month.
- Instituted GitHub Actions CI/CD with 130 Jest tests (87 % coverage), halving production bugs and enabling same-day hot-fixes.

Catapult @ Purdue

Project Innovation Lead

- Spearheaded a multidisciplinary team developing next-generation propulsion systems, resulting in 40% increased energy efficiency and successful patent application
- Led design and implementation of advanced prototyping techniques, reducing development cycles from 6 months • to 8 weeks while maintaining rigorous quality standards

BAPS (Bochasanwasi Shri Akshar Purshottam Sanstha)

National Development IT Member

- Led the Front End development team and volunteered in various IT sectors to support the Hindu culture for devotees worldwide.
- **Developed** and **managed** small and large-scale apps and websites for the organization, serving national and regional communities.
- Employing Jenkins and other DevOps tools and frameworks to push and deploy for both Front and back-end • code bases, overseeing a nationwide volunteer developer community and its efforts and dedication to operations.

Project RISHI (Rural India Social Health Improvement)

Events Co-Chair

- Collaborating with a team of students to address pressing health and social issues in rural communities across India.
- Engaging in research and data collection to develop sustainable solutions for improving access to healthcare, • education, and clean water in underdeveloped regions.

The Data Mine at Purdue University

Undergraduate AI | *ML Researcher*

- Oversaw a joint development team at Howmet Aerospace to design and roll out an end-to-end AI inspection pipeline, leveraging Kanban boards and two-week sprint cadences to deliver a fully functional prototype in under four months. The automated system slashed manual blade auditing time by roughly **30%**
- Architected and orchestrated data ingestion workflows in Python, employing **TensorFlow** for rapid model iteration and PyTorch for advanced fine-tuning. Curated and annotated more than 80 unique image collections

Projects

Find Your Nature (F.Y.N)

- A web app to allow users to research national parks around them and find reviews from other users to help them make informed decisions on the best attractions to visit.
- Designed and built the Front End leveraging HTML/CSS and acquired data from the National Parks Services and • Google Maps APIs utilizing JavaScript/jQuery; applied Firebase to store, and review feedback from users.

Technical Skills

Languages: Java, JavaScript, Swift, SQL, TypeScript, Go, Python, R Frameworks: React is, Node is, Express is, AngularJS, React Native, Redux, Flask, Django, PyTorch, TensorFlow, GraphQL, REST APIs, AWS (Airflow, S3), Docker, Kubernetes, Jenkins, Google Test, Bazel, Webpack, Babel Other Tools/Technologies: Heroku, Netlify, MATLAB, Excel, Access, Power BI, MySQL, PostgreSQL, MongoDB, HTML, CSS, Git, Linux, Terraform

New York City, NY

West Lafayette, IN

August 2023 – December 2026

July 2025 – September 2025

Robbinsville, NJ

June 2022 – Present

West Lafayette, IN

August 2024 – Present

West Lafavette, IN

West Lafavette, IN August 2024 – Present

May 2024 – December 2024

July 2024 – August 2024