Dhruv Patel

(747) 257-7194 — <u>dhruv.patel.imp@gmail.com</u> — <u>Portfolio Website</u> — <u>GitHub</u> — <u>LinkedIn</u>

TECHNICAL SKILLS

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

Libraries & Tools: Pandas, NumPy, Matplotlib, Seaborn, PyTorch, Folium, GeoPandas

Other: Git, Jupyter, Excel, Tableau, ArcGIS

PROJECTS

Public Transit Optimization (2025)

Used GTFS and Census data to identify underserved areas in San Diego County and proposed optimized routes using NetworkX and ArcGIS.

League of Legends Win Rate Analysis (2025)

Applied hypothesis testing on Oracle's Elixir dataset to analyze regional disparities in win rates using Pandas and Matplotlib.

Boston Cycling Route Mapping (2025)

Built an interactive trip frequency map using GeoPandas and Folium to visualize usage hotspots and inform infrastructure planning.

Urbanization & Power Outages (2024)

Explored the relationship between urban expansion and blackout frequency using national infrastructure data and statistical modeling.

Interactive General Knowledge Quiz App (2024)

Created a Java-based quiz app using double-linked lists and implemented dynamic UI with animated feedback.

WORK EXPERIENCE

Peer Mentor, OASIS Summer Bridge – UC San Diego

Apr 2023 – Present — San Diego, CA

- Mentored incoming first-year students, facilitated workshops, and connected them to campus academic resources.
- Contributed to increasing student retention and community integration through personalized support.

STEM Tutor Intern, Boys and Girls Club – LA Harbor

Mar 2022 – Aug 2022 — Los Angeles, CA

- Provided one-on-one tutoring for middle and high school students in math and science.
- Created individualized learning plans, leading to measurable improvements in student performance.

EDUCATION

University of California, San Diego

B.S. in Data Science Expected

Jun 2026

Relevant Coursework: Machine Learning, Scalable Systems, Data Visualization, Statistical Inference

Nathaniel Narbonne High School

High School Diploma Jun 2022