

# SUPRIYA BIRADAR

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linkedin

github

leetcode

portfolio

## Professional Summary

Software Engineer with experience building reliable software systems and automation infrastructure. Improved system reliability and delivery efficiency through CI/CD pipelines, backend API validation, and scalable testing frameworks. Strong foundation in data structures, algorithms, and system-level problem solving using C++, Java, and Python.

## Technical Skills

**Programming Languages:** Python, C++, Java, C, C#, TypeScript, JavaScript, SQL, HTML, CSS

**Software Engineering:** Data Structures & Algorithms, OOP, REST APIs, Debugging, Code Reusability, Secure Coding

**Testing & Automation:** Unit, Integration, End-to-End Testing, Playwright, Selenium, Cucumber (BDD)

**Databases & Tools:** RDBMS, Data Warehouses, Postman, Dash Plotly, Power BI (Basic), Jupyter, Dialogflow

**Cloud & DevOps:** Microsoft Azure, Google Cloud Platform, Jenkins (CI/CD), Git/GitHub, Maven

## Experience

### Tata Consultancy Services

Mumbai, India

Software Engineer

April 2025 – Present

- Improved regression reliability by 45% by designing and implementing a scalable UI automation infrastructure using Playwright (TypeScript) covering 200 test cases.
- Reduced manual testing effort by 40% by integrating automated test execution and reporting into CI/CD pipelines using Jenkins, Git, and Maven.
- Increased backend API validation coverage across 15+ services by building reusable REST API test frameworks using Bruno and Swagger, ensuring data integrity and security.
- Improved cross-team requirement clarity and reduced rework by translating 30 business scenarios into BDD-based executable tests using Cucumber.
- Improved system observability and debugging efficiency by developing a custom Playwright reporting framework with detailed failure diagnostics.

### SEED Infotech Institute

Pune, India

Data Science Trainee

June 2024 – December 2024

- Completed intensive Data Science training focusing on Machine Learning, Deep Learning, and Statistical Analysis for applied data-driven solutions.

### India Meteorological Department

Pune, India

Software Engineer Intern

June 2023 – December 2023

- Enabled real-time rainfall analysis for 28 states by developing a Python-based interactive dashboard using Dash Plotly processing 5+ years of meteorological data.
- Reduced data retrieval latency by 50% by implementing efficient data filtering and state-based query mechanisms.
- Improved decision-making efficiency for 5+ government agencies by delivering actionable insights from large-scale datasets.
- Ensured 99% production uptime by deploying and maintaining the dashboard on Render, supporting 50+ government stakeholders.

## Technical Projects

### Personal Portfolio Website | ReactJS, NextJs, REST APIs

GitHub

- Designed and developed a fully responsive personal portfolio using **React.js** and **Next.js**, following modern component-based architecture.
- Integrated **RESTful APIs** to dynamically manage and render content across pages.
- Optimized application performance, SEO, and accessibility using **Next.js best practices**.

### Aarogyam Healthcare Virtual Agent | Dialogflow, NLP, JavaScript, HTML, CSS

GitHub

- Built intelligent healthcare chatbot using Google Dialogflow for symptom analysis and appointment scheduling, reducing manual support workload by 40% for 1000+ patient queries
- Designed conversational AI flows with natural language processing, achieving 85% intent recognition accuracy

### DriveSmart Road Safety Web Application | Python, OpenCV, ML, JavaScript, HTML, CSS

- Achieved 95% accuracy in driver state detection by building a real-time computer vision system using OpenCV and ML algorithms.
- Reduced driver non-compliance by 40% by integrating location-based voice navigation APIs and automated document-expiry alert systems.
- Improved road-safety responsiveness by processing real-time video streams for drowsiness detection.

## Education

### G.H. Raisoni College of Engineering and Management

Pune, India

Bachelor of Technology in Computer Science — CGPA: 9.11/10.0

Jun 2020 – Jun 2024

## Certifications & Achievements

Successfully completed the McKinsey Forward Learning Program, gaining hands-on exposure to structured problem-solving, effective communication, and professional skills

Microsoft GitHub Copilot Certification (Dec 2025)

Google Cloud Certified Generative AI Leader (Aug 2025)

Databricks Certified Generative AI Engineer Associate (Nov 2025) and Data Engineer Associate (Oct 2025)

Secured 2nd rank at a national-level hackathon among 500+ teams for an AI-powered road safety solution.

ranked 6<sup>th</sup> nationwide in the final round of the Smart Pune Health Hackathon

Solved 600+ coding problems on LeetCode, strengthening Data Structures and Algorithms proficiency.