Prateek Shukla

Summary

Upcoming B.Tech graduate with a strong foundation in software engineering and backend development. Quick learner, effective in both team and independent roles.

Education

• Thapar Institute of Engineering and Technology

B. Tech in Computer and Electronics

Sep 2022 – May 2026 Patiala, Punjab

- CGPA: 8.17

Technical Skills

- Languages: JavaScript, TypeScript, Python, C/C++
- Backend & WebTools: Node.js, Express.js, MongoDB, PostgreSQL, FastAPI, HTML, CSS, TailwindCSS, React.js
- Cloud: AWS (EC2, S3, DynamoDB, RDS, SNS, SQS)
- AI/ML: Machine Learning, Deep Learning, TensorFlow, Scikit-learn
- Developer Tools: Git, GitHub, Linux

Experience

• EDUREKA July 2024 – Oct 2024

Data Science Trainee

Remote

- Worked on data analysis projects utilizing **Python**, **Pandas**, **NumPy**, and Machine Learning algorithms.
- Built and optimized ML models, improving accuracy by 40% using Python and Scikit-learn.
- Implemented exploratory data analysis (EDA) to extract insights and visualize trends using Matplotlib and Seaborn.

Projects

- Path Panda Multi-Modal Route Optimizer [Github] Node.js, FastAPI, Python, NetworkX, MongoDB, REST API
 - Developed **Path Panda**, an engine to find the **cheapest** routes between cities using multi-modal transport (train, bus).
 - Built a data pipeline integrating IRCTC API and scraped bus routes, storing them in MongoDB.
 - Implemented **modified Dijkstra's algorithm** for route optimization, modeling cities as multi-mode nodes
 - Enabled mode switching between transport types and optimized for fare and mode transfers.
- RailGo PNR Tracking and Subscription System [Github] Node.js, Express, MongoDB, AWS, REST API
 - Designed a backend service to let authenticated users subscribe to Indian Railways PNR status updates.
 - Integrated RapidAPI IRCTC PNR API to fetch real-time journey details like Train No, Arrival/Departure time, etc.
 - Stored user-specific PNR subscriptions in MongoDB with JWT-based authentication middleware.
 - Implemented future-ready notification system using AWS SNS to send journey details via email.

Leadership & Extracurricular

- AIESEC in Patiala Feb 2024 Feb 2025 Head of Membership Development Thapar Institute
 - Led a team of 75 members, fostering collaboration and growth.
 - Organized a Regional Conference with 120+ attendees.
- Puranchandra Vidyaniketan Apr 21 Apr 22 President, Tech Society Kanpur, Uttar Pradesh
 - Led a team of 80+ members to organize an interschool tech fest.
 - Collaborated with faculty to manage budgets and execution.