

NIHAR KUMAR PATEL

Computer Science Engineering Student

[Phone](#) | [Email](#) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Computer Science Engineering student specializing in software engineering, data engineering, and machine learning. Experienced in developing scalable ETL pipelines, predictive analytics models, and real-time data visualization systems using Python. Passionate about developing reliable software solutions, solving complex engineering challenges, and applying technology to build impactful, data-driven systems.

EDUCATION

Bachelor of Technology (B.Tech.) — Computer Science Engineering

Barkatullah University Institute of Technology, Bhopal

Expected Graduation: 2028 | CGPA: 7.32/10

TECHNICAL SKILLS

Programming: Python, C, C++

Data Processing: Pandas, NumPy, PyArrow, Parquet

Machine Learning: Scikit-learn, Feature Engineering, Model Evaluation, Predictive Analytics

Databases: MySQL, MongoDB

Web Development: React, TypeScript, Tailwind CSS

Developer Tools: Git, GitHub, Streamlit, VS Code, Netlify

PROJECTS

High-Dimensional ETL Pipeline

Python • Pandas • NumPy • PyArrow • Parquet

- Engineered a scalable ETL pipeline to process high-dimensional datasets using chunk-based streaming, optimizing memory utilization.
- Added checkpointing and recovery mechanisms enabling fault-tolerant processing and resumable execution.
- Processed 500K+ rows × 50 features with optimized batch operations.

F1 Telemetry Simulator

Python • Streamlit • Data Analytics • Machine Learning

- Built a real-time Formula 1 telemetry simulation platform modeling lap timing, DRS logic, pit strategies, tyre degradation, and safety-car scenarios.
- Built real-time analytics dashboards simulating 50+ race scenarios for strategy comparison.
- Integrated an ML-based prediction module to estimate lap performance.

Customer Churn Prediction System

Python • Scikit-learn • Data Analysis

- Developed an end-to-end ML pipeline for customer churn prediction using Random Forest models.
- Performed feature engineering, preprocessing, and evaluation to improve prediction reliability.
- Generated actionable churn insights from customer demographic and behavioral datasets.

Personal Portfolio Website

React • TypeScript • Tailwind CSS

- Built and deployed a fully responsive portfolio website showcasing projects and technical skills.
- Implemented modular UI components and optimized performance for fast loading.

EXPERIENCE

Founder | Tarunika India

Jun 2026 – Present

- Founded and manage a homemade food brand, overseeing branding, operations, product quality, inventory planning, and customer engagement.
- Developed digital marketing strategies while strengthening leadership, problem-solving, and business operations skills.

Data Science Intern — Python & Data Analytics | Learning Education Hub

Jan 2026 – Jun 2026 | Bhopal, India

- Worked on Python-based data processing, data preprocessing, exploratory data analysis, statistical analysis, and data visualization using structured datasets.
- Applied data science methodologies to practical datasets and problem statements, performing data preparation, transformation, analysis, and insight generation.
- Gained practical exposure to machine learning fundamentals, Data Science, Data Analytics, and Data Engineering while strengthening analytical and problem-solving skills.

Industrial IoT Trainee | NITTTR Bhopal × Siemens

Mar 2025 | Bhopal, India

- Completed hands-on Industrial IoT training using Siemens technologies, including Siemens Insight Hub, Node-RED, and Digital Twin concepts.
- Developed industrial monitoring dashboards and gained practical exposure to Industry 4.0, industrial automation, and telemetry systems.

CERTIFICATIONS

- Internet of Things – **Siemens × NITTTR**
- Introduction to Generative **AI** – **MIT**
- Introduction to Data Science – **Santander Open Academy**
- Artificial Intelligence & Productivity – **Google**

INTERESTS

Formula 1 Engineering • Artificial Intelligence • Data Engineering • Software Engineering