SANIA JAIN

+91 7869358215 ◇ Bhopal, Madhya Pradesh

jainsania3@gmail.com ◇ linkedin.com/in/sania-jain ◇ github.com/saniajain3 ◇ leetcode.com/u/SANIAj/

ABOUT ME

Final-year CS student with experience building software in Python and C++. Passionate about writing efficient code and eager to master large-scale system design to make a real world impact.

EXPERIENCE

SDE Summer trainee   May 2025 - Jun 2025
Defence Research and Development Organisation   *New Delhi*

- Developed and deployed **scalable** Employee Information System using **RESTful APIs in .NET Core**, automating data workflows and reducing manual processing time by 60%, saving 4+ hours weekly.
- Enforced **JWT** token-based authentication, secure data handling, and user role management for 300+ employees and reduced manual processing time by 60% with responsive front-end interfaces through **AngularJS** front-end interfaces.

Data Analyst Intern   Nov 2023 - Jan 2024
Alankar   *Bhopal, Madhya pradesh*

- Achieved a 15% increase in bookings by analyzing seasonality patterns and recommending targeted marketing strategies tailored to the primary guest age group of 34-50 years.
- Proposed expanding car parking spaces by analyzing trends, resulting in a 10% increase in bookings by enhancing guest convenience and smoother operations.
- Developed an interactive dashboard to visualize key hotel metrics using **Power BI** supported by **SQL** queries to prepare data, delivered to executives for data-driven decision-making

PROJECTS

Churn Prediction with Time-to-Event Modeling — BCG Data science Simulation Extension

- Developed a time-to-event churn prediction model using Survival Analysis (Cox Proportional Hazard) achieving 83% accuracy, 0.47 Brier Score and 0.72 C-index, shifting from binary classification to a time-dependent framework to pinpoint optimal intervention timing.
- Engineered a **scalable ML pipeline** with **XGBoost**, Streamlit, and SHAP, automating **preprocessing** and daily inference for **5,000+** customer records.
- Enhanced model transparency by integrating SHAP explainability, enabling business teams to identify key behavioral drivers of attrition such as night calls and evening usage.

Algorithmic Polynomial Solver for Multi-Base Inputs (C++)

- Built a custom JSON parser in C++ using regex and STL to decode numbers from arbitrary bases into decimal values, eliminating external dependencies and improving parsing efficiency by 100%.
- Designed and implemented a quadratic polynomial solver using Cramer's rule, calculating constants with BigInt/BigFloat precision for values up to 10^{18}.

EDUCATION

Bachelor of Technology(Computer science), VIT Bhopal University   Oct 2022 - Jul 2026(Expected)
CGPA: 8.26/10
Relevant Coursework: Operating System, Data Structures and Algorithms, Computer Networks, Object Oriented Programming, Database Management Systems, Machine Learning, Software Engineering, AWS Cloud Practitioner

SKILLS

Technical Skills   Python, HTML, CSS, SQL, Git, GitHub, AWS, C/C++, Google Colab, Rest API, JSON

CERTIFICATIONS & TRAINING

Google Data Analytics Professional Certificate

- Executed SQL queries (MySQL, MS SQL) in **BigQuery** and built **Tableau** dashboards on large datasets of up to **millions of rows**, improving data accessibility and enabling 50% faster management decisions.

PwC Salesforce CTDP 3.0 training

- Completed 50+ Salesforce Trailhead badges in data modeling, AI/ML, and Lightning Web Components, gaining practical skills in software development, automation, and scalable application design.

LEADERSHIP

- Organized 3+ technical events fostering an inclusive developer community, engaging 300+ participants, and coordinating cross-functional event logistics.
- Awarded 2nd Runner-up at IEEE Ideathon and 1st Runner-up at Notion Startup Competition for a **scalable** phone repair concept, gained hands-on experience in strategic planning and innovation.