Agam Singh Saini

EDUCATION

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Masters in Data Science for Innovation	University of Technology Sydney, Sydney.
B.E. in Mechatronics Engineering; CGPA: 8.77	Thapar Institute of Engineering and Technology, Patiala.
10 + 2: Percentage: 86.2. || 10: Percentage: 84.4	Ryan International School, Chandigarh, Chandigarh.

WORK EXPERIENCE

Maruti Suzuki India Limited — Gurugram, Haryana, India
Data Analyst Graduate Engineering Trainee R&D Full Time — *Jun 2024 - Jan 2025*

- Developed an interactive Power BI dashboard to analyze brake and suspension performance metrics, streamlining issue identification and resolution within the workflow. Collaborated with cross-functional engineering teams to ensure data accuracy, contributing to measurable improvements in vehicle dynamics and component reliability.
- Leveraged data visualization techniques to pinpoint critical performance issues in brake and suspension systems, driving measurable enhancements in vehicle dynamics and component reliability.

CVRDE DRDO — Avadi, Chennai, India
Robotics Engineering R&D Intern — *Jan 2023 - June 2023*

- Researched, designed, and simulated advanced MAV components, robotic arms and indexing mechanisms using PTC Creo, Solidworks, and Gazebo. Implemented object detection (person), wall avoidance, for tanks through ROS2. Successfully showcased possible solution with robotics
- Project showcased MAV technology exploration, robotic arm design, tank automation, and wireless control, leading to practical simulations demonstrating autonomous capabilities and advanced robotic functionalities. Successfully evaluated the performance of the autonomous system.

Spectrum Technology — Ambala, Haryana, India
Mechatronics Engineering Intern — *June 2023 - Aug 2023*

- Utilizing LabVIEW in conjunction with VISA, an integration framework, syncing an Arduino Uno, a temperature sensor, and an LCD screen. The system not only monitored dangerous machine temperature thresholds but also persisted the count of threshold breaches even across Arduino power reboots, exemplifying seamless data continuity and synergy across hardware components.

PROJECTS

PCOS Detection Using Machine Learning Methods: | *Link*

- Developed predictive models for Polycystic Ovary Syndrome (PCOS) detection using clinical and lifestyle data.
- Optimized feature selection and classification, achieving **89% recall** for true PCOS cases.
- Tech: Python, Scikit-Learn, Data Analytics, Machine Learning, Data Visualization. (May '25)

Telecom Customer Satisfaction & Churn Prediction: | *Link*

- Built a machine learning model to predict customer satisfaction and churn for a telecom company.
- Segmented customers into Promoters, Passives, and Detractors for targeted retention strategies.
- Used EDA, feature engineering, and a Random Forest Classifier to identify high-risk customers.
- Tech: Python, Scikit-Learn, Pandas, Data Visualization, SMOTE. (September '25)

Student at Academic Risk Detector: | *Link*

- Developed a machine learning solution to identify students at risk of academic underperformance.
- Implemented data preprocessing, feature engineering, and model training for early intervention.
- Generated actionable insights to support student success and retention.
- Tech: Python, Scikit-Learn, Pandas, Data Analytics, Machine Learning. (June '25)

SKILLS

Programming: Python, C++, C, SQL
Technologies: Power BI (including DAX), Git, SQL, Dbeaver, Docker, MS Excel, MS Word, MS PowerPoint, MS Office Suite.
Core Competencies: Machine Learning, Deep Learning, Data Analytics, Data Visualization, Image Processing, Big Data, Exploratory Data Analysis (EDA), ETL Pipelines.
Soft Skills: Project Management, Teamwork, Leadership, Critical Thinking, Problem Solving, Communication, Presentation.

Certificates

Data Camp: Data Scientist

NPTEL: Data Analytics with Python, Introduction to Machine Learning, Programming, Data Structures And Algorithms Using Python.

Coursera: What is Data Science, Tools for Data Science, Data Science Methodology, Introduction to Data Science in Python, Databases and SQL for Data Science with Python, Specialization-Introduction to Data Science.

Extra Curricular Activities

NCC: National Cadet Corps Airwing Thapar Institute of Engineering and Technology (Discipline, Leadership, comradeship, Communication) (April '21 - June '24)

NSS: National Socail Sevices Thapar Institute of Engineering and Technology (Community services, Organising camps, leadership)(April '21 - June '24)

Core of Thapar Adventure Club: Conducted and Managed Trips, Treks, events, and fests for Thapar students. (Management, Documentation, Event management, Crowd handling)(Jan 2020 - June '24)

Core at Mechtronics and Robotics Society Patiala, India: Society Technical Lead, Conducted workshops and delivered workshops reaching over 2000 Students. (Robotics, Ai, Computer vision) (Jan 2020 - Present)