

Vikrant Sharma.

Machine Learning Engineer specialising in cybersecurity

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SUMMARY

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Master of Information Technology candidate at the University of the Sunshine Coast (Adelaide), graduating August 2027. Built seven production ML and security systems with live public demos and open-source code, sitting at the intersection of machine learning and cyber operations. NASA Space Apps Global Finalist 2023. Oracle Cloud Infrastructure 2025 Certified Data Science Professional. Industry experience in data engineering at Nagarro and cybersecurity analysis at AT SecurDI.

TECHNICAL SKILLS

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Machine Learning: Python, scikit-learn, PyTorch, XGBoost, SMOTE, Pandas, NumPy, Streamlit, Anomaly Detection, Ensemble Methods

Cybersecurity: MITRE ATT&CK, OWASP Top 10, NIST CSF, ISO 27001, SIEM, Suricata, Wireshark, Incident Response, Threat Intelligence, Vulnerability Assessment

Data Engineering: SQL, AWS Redshift, Snowflake, PostgreSQL, SQLite, Apache Airflow, ETL/ELT Pipelines, Dimensional Modelling, Data Warehousing

Web & API: FastAPI, Flask, React, Astro, Node.js, TypeScript, JavaScript, Pydantic, Tailwind CSS, REST APIs

Cloud & DevOps: AWS, Oracle Cloud Infrastructure, Cloudflare, Hugging Face, Docker, GitHub Actions, Linux, Git, CI/CD

Languages: Python, SQL, TypeScript, JavaScript, Bash, C, Java, PHP, HTML, CSS

PROFESSIONAL EXPERIENCE

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Data Engineer @ Nagarro

December 2024 — February 2025

Adelaide, Australia

- Designed and optimised dimensional data models on AWS Redshift and Snowflake for enterprise analytics workloads.
- Built ETL pipelines that transformed high-volume transactional data into analyst-ready dimensional tables.
- Delivered iterative client work via Agile and Scrum methodology, contributing to weekly deliverables for enterprise stakeholders.
- Collaborated with cross-functional teams of data analysts and product owners to define data requirements and reporting structures.

Cybersecurity Junior Analyst @ AT SecurDI

May 2023 — December 2023

Ahmedabad, India

- Monitored Security Information and Event Management (SIEM) platforms and triaged alerts to identify and escalate genuine security incidents.
- Authored incident response runbooks adopted by the wider security operations team, standardising response procedures across incident categories.
- Performed OWASP Top 10 web application security testing for client engagements, including injection, broken access control, and security misconfiguration vulnerabilities.
- Conducted ISO 27001 and NIST Cybersecurity Framework compliance audits across multiple client environments, documenting findings and remediation paths.

Hybrid Machine Learning Intrusion Detection System — Master's Capstone github.com/Vikrant892/ids-project

- Real-time hybrid Network and Host Intrusion Detection System combining Isolation Forest, Random Forest, and Autoencoder ensemble methods on the CICIDS2017 dataset.
- Maps every alert to MITRE ATT&CK tactics so Security Operations Centre analysts triage in seconds, not minutes.
- Deployed as a live Streamlit dashboard on Hugging Face Spaces. Stack: Python, PyTorch, scikit-learn, Scapy, Docker.

ThreatLens — Threat Intelligence Platform github.com/Vikrant892/threat-lens

- FastAPI service correlating CVE data from the National Vulnerability Database with IP reputation and MITRE ATT&CK technique mappings.
- Composite scoring engine pre-ranks alerts by exploit availability, asset exposure, and temporal relevance to reduce SOC alert fatigue.

Credit Card Fraud Detection Pipeline github.com/Vikrant892/credit-card-fraud-detection

- End-to-end ML pipeline on the 284,807-transaction Kaggle dataset with a 0.17 percent positive class.
- SMOTE oversampling to handle severe class imbalance; trained Logistic Regression, Random Forest, and XGBoost for comparison.
- Precision-recall threshold tuning aligning the decision boundary with realistic deployment trade-offs.

Cosmic Keys — NASA Space Apps 2023 Global Finalist github.com/Vikrant892/nasa-space-challenge

- Sonification engine converting planetary data (latitude, longitude, orbital velocity, surface temperature) into piano music.
- Selected with Team Eklavya from thousands of international entries in NASA's annual hackathon.

Lightweight SIEM Log Analyser github.com/Vikrant892/log-analyzer-dashboard

- Flask dashboard that parses syslog, auth.log, and web access logs; flags brute-force and port scans in seconds.
- MITRE ATT&CK alert mapping. Designed for small teams without a Splunk budget.

EDUCATION

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Master of Information Technology — University of the Sunshine Coast 2025 — Aug 2027 (expected)*Adelaide Campus · Focus: data systems, software engineering, cybersecurity research***Bachelor of Computer Applications — CHARUSAT (CMPICA)** India*Class Representative recognition for academic leadership · Please confirm exact degree title and dates*

CERTIFICATIONS

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- **Oracle Cloud Infrastructure 2025 Certified Data Science Professional** — Oracle, August 2025
- **AWS Certified Data Engineer — Associate (in progress)** — Amazon Web Services, exam scheduled within the next month
- **NASA Space Apps Galactic Problem Solver** — NASA International Space Apps Challenge, October 2023
- **Backend Web Development: Express & Node.js** — DevTown × GDSC KIIT × AWS Community Builders, January 2023
- **TCS iON Career Edge: Young Professional** — Tata Consultancy Services, September 2023

AWARDS & RECOGNITION

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- **NASA Space Apps Challenge Global Finalist 2023** — Selected with Team Eklavya from thousands of international entries for the AstroSonify project, a planetary-data sonification engine.

- **ASUS Republic of Gamers Showdown** — Three consecutive 2v2 podium finishes (2nd, 2nd, 3rd) in the competitive series at The Sports Club.
- **Class Representative** — Charotar University of Science and Technology, recognised for academic leadership during undergraduate studies.

ADDITIONAL

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- **Languages** — English (fluent, business), Hindi (native).
- **Australian Work Rights** — Student Visa Subclass 500. Eligible for Post-Study Work Stream Subclass 485 visa upon graduation in August 2027.