CURRICULUM VITAE

# Vikrant Sharma

## AI & Data Engineer | Security Researcher – Synack Red Team (SRT)

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I build intelligent applications and reliable data infrastructure, integrate AI into software systems and research application security. Experience and engagements across Synack, Voxon Photonics, Nagarro, SecurDI. NASA Space Apps Global Finalist 2023. Open to AI, data engineering and cybersecurity opportunities in Adelaide.

## EXPERIENCE

### Security Researcher · Synack

Nov 2026 to Present

Contract · Remote

- Selected as a member of the Synack Red Team (SRT), a vetted global community of cybersecurity researchers.
- Contract researcher membership. Focus areas: security research, vulnerability assessment, penetration testing, web application, API and infrastructure security, and responsible vulnerability disclosure.

### Artificial Intelligence Engineer Intern · Voxon Photonics

Aug 2026 to Nov 2026 · Completed

Internship · Adelaide, Australia · On-site

- Worked on native AI integration in VoxelOS through UniSC's Master of ICT dissertation industry placement, completed in November 2026.
- Developed two pipelines for the internal Command Centre, supporting AI-assisted workflows, software and API integration, and intelligent automation.
- Built Unreal Engine MetaHuman prototypes with real-time facial expressions and voice-driven interaction.

### Data Engineer · Nagarro

Dec 2024 to Feb 2025

Full-time · Udyog Vihar, Sector 18, Gurugram, Haryana · Remote

- 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, collaborating with cross-functional teams of data analysts and product owners.

### Cyber Security Junior Analyst · SecurDI

May 2023 to Dec 2023

Internship · Remote

- Monitored SIEM platforms and triaged alerts to identify and escalate genuine security incidents.
- Authored incident response runbooks adopted by the wider security operations team.
- Performed OWASP Top 10 web application security testing for client engagements.
- Conducted ISO 27001 and NIST CSF compliance audits across multiple client environments.

## SELECTED PROJECTS

### StudentOps Data Platform

An end-to-end data platform that ingests six sources into a layered Postgres warehouse with dbt and Prefect, then serves a dashboard, a daily digest and a Claude assistant.

Python · SQL · PostgreSQL · dbt · Prefect · Streamlit · Claude API

### Hybrid ML Intrusion Detection

A real-time hybrid intrusion detection system that runs an ensemble of ML models over network traffic and maps every alert to MITRE ATT&CK.

Python · PyTorch · scikit-learn · Scapy · Streamlit · Docker

### ThreatLens

A CVE triage service that prioritises vulnerabilities using exploit indicators, asset exposure and threat context.

FastAPI · NVD API · MITRE ATT&CK · Pydantic

### Cosmic Keys

A planetary-data sonification engine that turns numbers into music, a NASA Space Apps Global Finalist project.

Python · Streamlit · NumPy · PIL

## TECHNICAL SKILLS

| | |
|---|---|
| **Machine learning** | Python, Machine Learning, Deep Learning, AI Integration, PyTorch, scikit-learn, XGBoost, SMOTE, Pandas, NumPy, anomaly detection, Intelligent Automation |
| **Cybersecurity** | Security Research, Penetration Testing, Vulnerability Assessment, Web Application Security, API Security, Network Security, MITRE ATT&CK, OWASP Top 10, NIST CSF, ISO 27001, SIEM, Suricata, Wireshark, incident response |
| **Data engineering** | Python, SQL, AWS Redshift, Snowflake, PostgreSQL, dbt, Prefect, Apache Airflow, ETL/ELT, Data Modelling, dimensional modelling |
| **Web, cloud and DevOps** | FastAPI, Flask, Node.js, React, Astro, TypeScript, Docker, AWS, OCI, Cloudflare, Git, GitHub Actions, Linux |

## EDUCATION

### Master of Information and Communications Technology

Jul 2025 to Aug 2027 (expected)

University of the Sunshine Coast, Adelaide Campus

### Bachelor of Computer Applications

2021 to 2024

CHARUSAT, CMPICA

## CERTIFICATIONS & AWARDS

- **AWS Certified Data Engineer - Associate** · Amazon Web Services · 2026
- **Oracle Cloud Infrastructure 2025 Certified Data Science Professional** · Oracle · 2025
- **NASA Galactic Problem Solver** · NASA Space Apps Challenge · 2023
- **icSoftComp Intl. Conference** · Springer and CHARUSAT · 2022
- **TCS iON Career Edge** · Tata Consultancy Services · 2023
- **Backend Web Dev, Express and Node** · DevTown, GDSC KIIT, AWS CB · 2023
- **NASA Space Apps Challenge Global Finalist** · Team Eklavya · 2023

## AVAILABILITY & WORK RIGHTS

International student (subclass 500). Work availability is subject to my visa conditions.