

OM SHAH

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PROFESSIONAL SUMMARY

Cybersecurity student at UTS and Automation Engineer with experience building Python tools for vulnerability assessment, workflow automation, document validation, and web-based data collection. Delivered internal tooling that reduced manual handling, improved audit readiness, and increased process reliability across high-volume casework.

EDUCATION

University of Technology Sydney | 2023 - Present

Bachelor of Cybersecurity | Full-time

- **Expected Graduation:** June 2026
 - **WAM:** 71.32 | **GPA:** 5.17/7.0
 - **Relevant Subjects:** Cloud Security, Applying Network Security, System Security, Digital Forensics, Cyber Threat Intelligence and Incident Response, Cryptography
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PROFESSIONAL EXPERIENCE

Migrate Zone | Jul 2023 - Present

Automation Engineer | Part-time (Dec 2024 - Present)

- Expanded the internal automation toolkit to streamline visa processing workflows and support higher case volumes after the company's UAE expansion.
- Consolidated financial audit checks into a single workflow, reducing duplicate checks and manual cross-referencing.
- Co-led the redesign and rollout of modular automations for file naming, risk flagging, and routing, reducing average case handling time from about 8.0 hours to 5.3 hours per case, a roughly 35% improvement.
- Developed a prefill tool that mapped validated case data into Excel lodgement templates, reducing repetitive data checks and speeding up preparation.
- Built a lightweight scraping tool to monitor policy update pages, removing the need for repeated manual website checks.

Junior Automation Engineer | Part-time (Jul 2023 - Nov 2024)

- Built Python scripts to automate case data entry and reduce repetitive manual processing across visa workflows.
- Co-developed a PDF collation and OCR-based document validation workflow that reduced manual review time and detected missed, outdated, or lapsed documents before lodgement, catching dozens of issues each month.
- Produced internal documentation that enabled staff to use the toolkit without ongoing developer support.

ITonKey | Aug 2024 - Oct 2024

Python Backend Developer Intern | Part-time

- Built a Python invoicing tool that converted structured business data into branded, multi-page PDF invoices using templated layouts aligned with internal workflows.
 - Contributed to custom software development for small business clients, including inventory management features for stock tracking and basic reporting.
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PROJECTS

Cybersecurity Capstone Studio, UTS, 2025

Sentinel (Automated Network Vulnerability Assessment Tool)

- Built a Python tool that scanned target subnets with Nmap/NSE and matched discovered services against locally indexed NVD CVE data to identify likely vulnerabilities.
- Improved accuracy by flattening nested Nmap output, handling host-level script results, and adding CPE mappings for common services.

- Reduced scan noise by filtering unsuitable results, limiting duplicate CVEs, and exporting findings to JSON with verification commands.

Personal Project, 2025

TLS Interception Lab with mitmproxy

- Built a controlled lab using mitmproxy to intercept and inspect HTTPS traffic in real time within an isolated environment.
- Installed a rogue certificate authority on a Windows 10 VM to demonstrate how trust in the certificate chain can allow decrypted viewing of login flows and form submissions.
- Documented the setup, attack flow, and security implications for authorised lab testing only.

Data Analytics, UTS, 2026

SMS Bulk-Style Detector (Machine Learning)

- Built a neural network model to classify SMS text by the probability that its wording resembled bulk or automated messaging.
- Trained the model on labelled SMS data and deployed it as a backend API with a live demo interface.
- Added a fallback keyword-based estimate so the demo remained usable if the API was unavailable.

Migrate Zone, 2024 - 2025

Immigration Case Workflow Automation Toolkit

- Built a Python pipeline to ingest uploaded case documents, merge files in batches, run OCR, and index pages for later checks.
- Added scan quality checks using OCR text coverage and confidence scores to flag low-quality or unreadable scans before lodgement.
- Modelled document requirements in JSON and Excel, then applied rule-based checks to classify documents, detect missing items, and generate structured review outputs.

TECHNICAL SKILLS

Security: Nmap/NSE, Wireshark, Metasploit, Postman, Chrome DevTools, Web Application Testing

Programming: Python, HTML, CSS, Selenium, JSON, CSV, Excel, Power Query

Tools: Git, GitHub, Jira, VMware, VirtualBox, Cisco Packet Tracer