Visal Dam

Security Engineer | Associate Teaching Fellow

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Address: Melbourne, VIC
Portfolio | **LinkedIn** | **GitHub** | **Staff Profile**

CAREER PROFILE

Results-driven High Distinction Cybersecurity student. Skilled in designing and evaluating secure systems, through hands-on IaC, DevOps, and security projects, as well as published, university-funded research (Q1). Experienced with implementing security-oriented Machine Learning solutions and digital forensics. Holds multiple technical certifications such as CSCU, CHFI, and SC-900.

TECHNICAL SKILLS

Languages: Python, Terraform, Rego (OPA), Bash, PowerShell, SQL, Java, JavaScript, C/C++, R
Tools: Mininet (SDN), ONOS (SDN), Docker, Kali Linux, Tenable, Wireshark, Suricata, Autopsy, Splunk, MS 365, sklearn, VirtualBox, LaTeX (Overleaf), Nmap, Burp Suite, Metasploit, Volatility
Cloud: GCP, AWS

PROFESSIONAL EXPERIENCE

Associate Teaching Fellow   *Mar/2025 – present*
School of IT, Deakin University, Australia
- Tutor for SIT102 (Intro to Programming), SIT192 (Discrete Maths), and SIT292 (Linear Algebra).
- Marked and provided feedback on university-level assessment tasks (1000+ to date).
- Supervised active learning workshops and seminars for 500+ students each trimester, achieving 100% student satisfaction.

Security Engineer – Policy Deployment Engine (for cloud environments)   *Mar/2025 – Oct/2025*
School of IT, Deakin University, Australia
- Designed and currently maintain an internal security policy development framework in Rego, enabling 300+ standardized policies covering 100+ GCP services.
- Authored competency tests, technical documentation, and automated GCP service allocation, using Microsoft Power Automate, to enable the development of security policies, reducing assignment time from 24 hours to 10 minutes.
- Reviewed raised policies to ensure high standards and conformity levels project-wide (60 members).

Undergraduate Researcher   *Nov/2024 – Feb/2025*
Deakin Cyber Research and Innovation Centre, Deakin University, Australia
- Conceived PRISM-Prov, a novel security framework for Software-defined Networks (SDNs) using security-aware data provenance and security policies to enhance data transparency.
- Implemented a proof-of-concept in Python for the ONOS controller, as well as executed attack cases and measured overhead (CPU, processing time, heap memory) to evaluate performance.
- Research poster showcased at the *28th International Symposium on Research in Attacks, Intrusions and Defenses* (*RAID 2025*).
- Results were published in *Computers & Security* (Q1): https://doi.org/10.1016/j.cose.2025.104677

Writing & Maths Mentor   *Feb/2024 – Oct/2025*
Student Success, Deakin University, Australia
- Provided support across academic writing and mathematics, with 60+ one-on-one mentoring sessions conducted to date collectively.
- Selected to provide training for new mentors via presentation slides over Zoom.

EDUCATION

Bachelor of Cybersecurity   *Mar/2023 – present*
Deakin University, Burwood (Melbourne, Australia)
- **Specialization**(**s**): Network Security, Cloud Security, Machine Learning
- **Achievements**: High Distinction average (WAM = 90.58) | Deakin STEM & International Scholarships (2023) | Deakin Cyber Research Bursary (2024) | Deakin Mathematics Yearbook Article Publication (2024) | Deakin IT Academy membership (2025) | Paper Publication in *Computers & Security* (2025)

PROJECTS (Full at https://visal-dam.github.io/portfolio-selected_projects)

Real-time Detection of RVC-based Deepfake Audio   *Aug/2025 – Sept/2025*
Objective: use Machine Learning to detect AI-synthetized speech.
Solution: evaluated several classification models against a custom dataset of real and synthesized speech, processing audio as 1-second blocks, achieving an accuracy of 95% with XGBoost at 5-7 blocks per second.

Malware Detection Engine   *May/2025 – May/2025*
Objective: use Machine Learning to detect malware.
Solution: automated the collection of static and dynamic features using Python and APIMiner from malicious and benign executables; resulting dataset used to train, test, and evaluated four classification models.

DDoS Mitigation in SDNs   *Aug/2024 - Sept/2024*
Objective: increase network standing time in SDNs under a DDoS attack.
Solution: utilized empty switch flow tables to offload DDoS traffic using Python and the REST API, on Mininet and ONOS; increased standing time by a factor of ≈4.6.

CERTIFICATIONS

Certified Computer Hacking Forensics Investigator (CHFI)   *Jun/2024*
EC-Council

Microsoft Certified: Security, Compliance, and Identity Fundamentals (SC-900)   *Mar/2024*
Microsoft

Certified Secure Computer User (CSCU)   *Jun/2023*
EC-Council

AWARDS

Deakin Cyber Research Training Bursary   *Nov/2024*
Deakin University

EXTRA-CURRICULAR ACTIVITIES

Networking & Community Team   *Oct/2024– present*
Deakin University Cybersecurity Association (DUCA), Burwood VIC 3125
- Facilitate smooth collaboration with Red Bull Australia sponsorship, securing cases of drinks for members at weekly events. Increased club membership by 200% via active promotion.

Head Student Volunteer   *Dec/2023 – present*
With A Mission (*Apr/2024 - present*)
(previously *Rotary Club of Box Hill* (*Dec/2023 – Apr/2024*))
- Facilitate and guide a biweekly food-handout event for 100+ students at Deakin Residential Services.