Tri Ho Dinh

Application Security Engineer | Ho Chi Minh City, Vietnam
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Education

University of Science, VNU-HCM — Ho Chi Minh City, Vietnam
B.Sc. in Information Technology (Information Security) — ***GPA: 3.84 / 4.0*** — *Sep. 2024 – Expected June 2028*
– **Availability: third-year student**; **part-time, 3–4 days/week** (from now); **full-time from Sep. 2027**.
– **Coursework:** Cryptography, Computer Networks, Operating Systems, Database Systems, Distributed Systems.

Experience

Meddies — Ho Chi Minh City, Vietnam
AI Engineer (Part-time) – Data Privacy & Clinical De-identification — *May 2026 – Present*
– Build **PII detection and masking** for clinical conversations in **20 languages**, protecting patient identity, contact, ID and insurance data before downstream use.
– Developed a **privacy-preserving synthetic data pipeline** (**1M** documents, 13 deterministic validation gates incl. SHA-256 de-duplication) so models train without real patient records.
– Developing **meddies-faker**, extending Faker with country-aware providers that reproduce real-world name and attribute distributions for **20 locales**.
– Resulting compact **350M** model, designed for **on-premise** deployment at healthcare providers, reaches **0.827 mean micro-F1** vs. **0.658** for the strongest baseline (OpenAI Privacy Filter).

IaC Lab, Faculty of IT, HCMUS — Ho Chi Minh City, Vietnam
Undergraduate Researcher – Static Analysis & DevSecOps — *Feb. 2026 – Present*
– Evaluated static analysis and **CI security gating** (Checkov, **Bandit**, secret scanners) across **3,700+ test suites**, standardizing findings as **SARIF** and **CycloneDX/SPDX SBOMs**.
– Studied false-positive reduction through **AST context propagation** over **1,346 policy rules**; now curating an open IaC security dataset for future research.

Projects

SmartATS – Secure AI Applicant Tracking System | *FastAPI, JWT, RBAC/ABAC, Azure* — July 2026 – Aug. 2026
– Hardened zero-trust access across **54 REST APIs** with object-level **ABAC**, role-based **RBAC** and field-level **PII masking**, preventing candidate enumeration and data over-exposure (**OWASP API1/API3/API5:2023**).
– Secured resume uploads with **PDF magic-byte verification** and short-lived **15-minute SAS URLs** on Azure Blob Storage, mitigating arbitrary file upload and data exposure.
– Built tamper-resistant review workflows with **audit logging**, input whitelisting and an **80% multi-party consensus lock** to protect screening-decision integrity.

Insurance Fraud Risk Detection & Triage | *Python, XGBoost, Docker Compose, Caddy* — Feb. 2026 – Apr. 2026
– Raised fraud detection recall from **18.4% to 65.0%** (3.5×) at **0.840 ROC-AUC** with configurable risk thresholds for triage workload.
– Containerized scoring services behind a **TLS-terminating Caddy reverse proxy**, isolating internal inference endpoints.

Publications

L. U. Le*, **T. Ho Dinh***, C. Hoang, H. H. Ha. *"Meddies-PII: A Multilingual Framework for PII Extraction in Clinical De-identification."* arXiv:2609.12544, 2026. [arXiv] (*co-first author)

Technical Skills

Application Security: OWASP Top 10 / API Security Top 10, JWT, RBAC/ABAC, Input Validation, Secure File Upload, Audit Logging
Data Privacy: PII Detection & Masking, Clinical De-identification, Synthetic Data
SAST & DevSecOps: Bandit, Checkov, Secret Scanning, SARIF, SBOM (CycloneDX/SPDX), GitHub Actions
Programming & Cloud: Python, C++, SQL, TypeScript/JavaScript; FastAPI, PostgreSQL, Docker, Azure
English: C1 (Oxford Placement Test)

Honors & Awards

RMIT Hackathon 2026 – **6th Globally**, **4th in Vietnam**, 3rd at Saigon South Campus (team of 4) — 2026
Academic Merit Scholarship – Faculty of IT, HCMUS (two consecutive years) — Jan. 2025 & Jan. 2026