ANUBHAVSINGH SAWDAGUR

PhD Candidate | AI Researcher | Cybersecurity Specialist

📍 Bras D'eau, Mauritius | 📞 +230 5702 2654 | ✉ anubhav_s@outlook.com | 🐙 github.com/Anu-bhav

EXECUTIVE PROFILE

Dual-Domain Specialist with a professional engineering track record **spanning since 2018**, merging **Offensive Cybersecurity** with **Artificial Intelligence**. Currently advancing the field of automated decision-making systems through PhD research on condition-adaptive trading strategies (LSTM/Transformers).

Renowned for a rigorous analytical approach and the ability to bridge the gap between academic theory and industry application. Dedicated to solving non-stationary data challenges through rigorous stochastic modeling and secure code implementation.

RESEARCH & INNOVATION

PhD Research: AI-Enhanced Adaptive Trading Frameworks   *University of Mauritius | Sep 2025 – Present*

- **The Challenge:** Traditional algorithmic trading fails during "regime shifts" (e.g., market crashes or volatility spikes).
- **The Innovation:** Developing a **"Multi-AI" Ecosystem** that operates exclusively on technical indicators. The system utilizes a "Master Strategy" algorithm to autonomously switch between specialized neural networks (LSTM vs. MLP) based on real-time market state detection.
- **Key Tech:** Python, Deep Reinforcement Learning (DRL), Transformers, Volatility Modeling.

BSc Capstone: Automated Web Application Auditing Framework   *Leeds Beckett University | 2020*

- **The Innovation:** Architected an **Automated Web Application Auditing Framework with AI Integration**.
- **Technical Approach:** Designed intelligent, rule-based automation logic to autonomously scan, detect, and classify web vulnerabilities (SQLi, XSS) without human intervention.
- **Impact:** This research was pivotal in achieving **First Class Honours** and receiving the university's highest academic distinction.

TECHNICAL ARSENAL

AI & Quantitative Analysis	Deep Reinforcement Learning (DRL), LSTM, Transformers, Ensemble Learning, Bayesian Hyperparameter Tuning (Hyperopt), Feature Engineering.
Cybersecurity Operations	Penetration Testing, Incident Response, Digital Forensics, Malware Analysis, AV Evasion, OWASP Top 10, Privilege Escalation (Linux/Windows).
Development & Scripting	**Python** (Pandas, NumPy, Scikit-Learn, PyTorch), **Bash Scripting**, C# (MVC Framework), PHP (Laravel), SQL, RESTful APIs.
Infrastructure	Docker Containerization, VMware Virtualization, Linux/Windows Server Administration, Secure Network Architecture.

CORE COMPETENCIES & LEADERSHIP

- **Technical Pedagogy:** Proven ability to simplify complex concepts (Cryptography, Routing Protocols) for diverse audiences, derived from 6+ years of lecturing experience.
- **Research Communication:** Skilled in writing high-level technical proposals and documentation, bridging the gap between academic theory and practical application.
- **Strategic Problem Solving:** Expertise in designing architectural solutions that balance performance with security compliance.
- **Mentorship:** Experienced in guiding students through capstone projects and fostering a collaborative research environment.

PROFESSIONAL EXPERIENCE

Lecturer: Advanced Networking & Security Curriculum   *Mar 2019 – Present*
Training Center of Excellence (TCoE)   Mauritius

- **Subject Matter Expert:** Solely responsible for delivering the **Advanced Networking and Security** syllabus.
- **Curriculum Design:** Modernized teaching materials to include practical labs on Network Defense, Routing Architectures, and Switching Protocols.
- **Impact:** Consistently commended by directorship for high student engagement and the ability to adapt teaching styles to individual learning needs.

Full-Stack Software Developer   *Jan 2018 – Feb 2019*
Infini Tech Ltd   Mauritius

- **Secure Development:** Engineered enterprise-grade web applications using **C# and ASP.NET MVC**. Focused heavily on "Security by Design" to mitigate SQL Injection and XSS risks.
- **Database Architecture:** Managed complex schemas on **MSSQL and Oracle** platforms, optimizing query performance for high-volume data processing.
- **Enterprise Integration:** Implemented Windows Authentication protocols for seamless internal Identity Management.

EDUCATION

Doctor of Philosophy (MPhil/PhD) in Information Systems *Enrolled: Sep 2025*
University of Mauritius Réduit
Focus: *Machine Learning Applications in Financial Markets.*

B.Sc. (Hons) Computer Forensics (First Class Honours) *Graduated: 2020*
Leeds Beckett University (UK)
Focus: *Forensics Analysis and Offensive Security.*

HONOURS & CERTIFICATIONS

- **Outstanding Achievement Award (2020):** Awarded by Leeds Beckett University for exceptional academic performance and technical excellence in Computer Forensics.
- **Offensive Security Certified Professional (OSCP):** *Candidate (In Progress).*

REFERENCES

Dr. Raj Kishen Moloo
Associate Professor
University of Mauritius
r.moloo@uom.ac.mu

Dr. Irfaan M. Coonjah
Director, TCoE
+230 575 68281
irfaan.coonjah@gmail.com