M.N.M Muaadh
Computer Science and Engineering Graduate

🔗 https://muaadh99.github.io/   💼 linkedin.com/in/mohamed-muaadh   🐙 github.com/muaadh99
✉ muaadh.20@cse.mrt.ac.lk   📞 +94 776566427

About Me

Software Engineer with hands-on experience in building secure, AI-driven cybersecurity platforms. Proven ability to design and deploy real-time systems using Python, React, Docker, and Elasticsearch. Developed and integrated machine learning models and LLM-based pipelines into threat analysis platforms. Passionate about security automation, backend scalability, and defending against modern cyber threats. Adept at working with cloud-native tools, CI/CD pipelines, and cybersecurity best practices, with a strong foundation in algorithms, data structures, and secure software development.

Work Experience

Software Engineer
Ivedha Inc.   *2025 Jun – Present*
Contributing to the development of **Botnex**, an automated **Vulnerability Assessment and Penetration Testing (VAPT)** platform built with **Django, React.js, PostgreSQL**, and **Elasticsearch**. Enhancing platform capabilities by integrating a context-aware **chatbot assistant** for dynamic interaction and reporting. Collaborating across engineering and security teams to improve automation workflows, data ingestion, and system scalability.

Associate Software Engineer (Cybersecurity-focused)
Ivedha Inc.   *2024 Jun – 2025 Jun*
Led development of **BotNex**, an AI-integrated internal automation and security platform using **React.js, Django, Flask, PostgreSQL, Elastic**, and **Docker**. Built and deployed **AI/ML-powered modules** using **OpenAI APIs** and **RAG pipelines** with Elasticsearch to assist in vulnerability triage. Collaborated with the **VAPT team** for testing and hardening enterprise systems. Utilized tools like **Jenkins, Sentinel One, M365 and VMware ESXi**.

Cyber Security Intern & Automation Developer
Ivedha Inc.   *2023 Nov – 2024 Jun*
Created scalable backend automation tools using **Python, Django, and Docker**, cutting manual analysis effort by 40%. Developed a CVE-based AI chatbot integrated with a custom RAG pipeline for real-time vulnerability insight. Supported **M365 hardening** and deployed on-prem infrastructure scripts.

Teaching Assistant
University of Moratuwa   *2024 Jan – 2025 Jun*
Programming Fundamentals (*Jun 2024 – Dec 2024*) — Taught and mentored over 100 students in core software engineering concepts including **data structures, algorithms**, and problem-solving strategies, under Prof. Sanath Jayasena.
Program Construction (*Jan 2024 – Jun 2025*) — Evaluated continuous assessments related to **object-oriented programming (OOP), design patterns**, and **concurrency**, under Prof. Chandana Gamage.

Education History

Computer Science and Engineering — University of Moratuwa
Class of 2020   *2021 Jan – 2025 Jun*
Minor in Mathematics offered by the Department of Mathematics

St. Aloysius' College — Class of 2019
3 Distinctions in A/L with Z-Score: 1.810   *2005 – 2019*

9 Distinctions in O/L

Technical Skills

AI/ML: PyTorch, TensorFlow, OpenAI API, HuggingFace Transformers, Scikit-learn, RAG pipelines
Data Science: Pandas, NumPy, Milvus
Cloud/DevOps: Docker, Jenkins, Git, CI/CD pipelines

Languages: Python, Java, JavaScript, C++
Frameworks: Flask, FastAPI, Django, React, Streamlit, Selenium
Databases: PostgreSQL, MongoDB, MySQL, ElasticSearch, SQLite, Milvus
Cyber Tools: Nessus, Zaproxy, BurpSuite, Sentinel One, Kali Linux, ESXi, KnowBe4
Methodologies: Agile, Scrum

Projects

AccoMind - FYP *2024 Jun – 2025 Jun*
An LLM-based solution for predicting investment opportunities in registered companies by analyzing financial documents and online data, delivering critical insights for informed decision-making.
Built a **Retrieval-Augmented Generation (RAG)** pipeline using **HuggingFace Transformers, Milvus**, and OpenAI APIs. Integrated visualization dashboards to aid analysts in decision-making.

SECURE E-VOTING SYSTEM *2024 Sep – 2024 Nov*
Built a secure e-voting platform utilizing **RSA-based blind signatures** for integrity and anonymity. Published research paper on architecture.
Technologies: Python, Flask, Streamlit

HRM Management System *2022 Sep – 2023 Jan*
Built a full-stack HRM system for administrative workflows.
Technologies: React.js, Node.js, MySQL

Email Client Java Application *2022 Mar – 2023 Aug*
Developed a Java-based email client with spam filtering and encryption.
Technologies: Java, OOP, Data Structures

Intergalactic Space Travel — A Mobile App *2022 Sep – 2022 Nov*
Developed an interactive Mobile App using cutting-edge technologies.
Technologies: Node.js, Express, MySQL

Honors & Awards

1st Runners-up – Aces Coder 11.0, Univ. of Peradeniya – 2024
4th Place – Aces Coder 10.0, Univ. of Peradeniya – 2023
1st Runners-up – Varsity Battles Capital Market Quiz, CSE – 2023
4th Place – Cybersecurity Quiz, ISACA, Univ. of Kelaniya – 2023
6th Place – Cyber CTF Challenge, IEEE WIE, KDU – 2023

Volunteer Work and Affiliations

Web Master — ESports of UoM *2023–2024*
Web Master — ACM of UoM *2023–2024*
Member — Gavel Club of UoM *2021–Present*
Volunteer — Project Heal a Nation (AIESEC) *2022*
Volunteer — Learn Steer E-Learning *2020*

References

Prof Gihan Dias
gihan@uom.lk
+94 114-216-065

Prof Chandana Gamage
chandag@cse.mrt.ac.lk
+94 777-748-3643