

# KAIROS TAY

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## Profile

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Cybersecurity and Digital Forensics student with experience in scientific research, software development, and digital forensics. Possesses strong aptitude for self-directed learning and a track record of completing projects autonomously. Seeking to push boundaries and drive innovation in cybersecurity.

## Education

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### Cybersecurity & Digital Forensics (Dip) | Ngee Ann Polytechnic

APR 2023 – PRESENT

- cGPA: 4.00
- DSTA Polytechnic Digital Scholar
- NullSec's President: Leading the EXCO team • Organised key events like YCEP and NullSecCTF.
- Participated in various CTFs, notably: CDDC 2024 (3<sup>rd</sup>) • GreyCTF 2024 (11<sup>th</sup>) • Hack@AC (16<sup>th</sup>).

## Experience

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### DevSecOps Engineer Intern | Ensign InfoSecurity Pte. Ltd.

AUG 2024 – OCT 2024

- Contributed to the research and development efforts of various cybersecurity solutions.
- Collaborated on the development of Ensign Aegis (ASM), enabling clients to manage their security posture by providing a holistic view of external-facing assets and proactively identifying vulnerabilities early.

### Research Intern | Science Centre Singapore

JAN 2021 – FEB 2022

- Developed methodologies to minimise experimental discrepancies of kinetic studies to a 1% error margin.
- Leveraged tools such as Arduino, LibreCAD and Excel to enhance data analysis efficiency and accuracy.
- Authored and presented a research paper to a panel and attendees at the Youth Science Conference.

## Projects

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### 404Unfound – CTF Team

- Founded a CTF team ([404Unfound.com](https://404Unfound.com)) for enthusiasts across various skill levels to learn from each other.

### BB84 Quantum Key Distribution (QKD) Simulator

- Developed a QKD tool using the Python Qiskit library to simulate various QKD environments with 84% accuracy.
- Integrated the simulator into a Flask web application, offering a more intuitive user experience.

### NLTK Sentiment Analyser

- Developed a CLI tool with Python for CTI to assess sentiment in text data and generate metric reports.

## Certifications

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### Cyber Security AI

Cisco: Linux Essentials • Networking Essentials • Cybersecurity Essentials  
AI Singapore – Literacy in AI

## Skills

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### Languages

### Cyber Security

### Science

### Soft Skills

Python • C# • C++ • HTML5 • CSS3 • JavaScript • Bash  
RedHat Sysadmin • Cryptography • Digital Forensics • Malware Analysis • Pentesting  
Scientific Research • Scientific Communications  
Adaptable • Proactive • Teamwork