

M GOURI SANKAR

Kerala, India | Ph: 6235628120 | mundancherygourisankar@gmail.com | [LinkedIn](#) | [Github](#) | [Profile](#)

WORK EXPERIENCE

INTERNATIONAL CENTRE FOR FREE AND OPEN SOURCE SOLUTIONS

Trivandrum, Kerala

Cyber Security Intern

September 2024 – Present

- Designed and implemented an **open source** scalable project that monitored the organization's IoT networks for **security incidents**, including **tailored algorithms** that improved **threat detection** by 50%.
- Carried out **Security Audits**, **configured and patched vulnerabilities** across 10+ **web applications, servers and LoRaWAN gateways** to strengthen security posture of the organization.
- Created detailed 20+ **reports** for stakeholders outlining **vulnerabilities** and tracking **applied patches**.
- Researched **Radio Frequency vulnerabilities**, developed **PoC exploits** and recommended remediations.

PROJECTS

ARGUS - IoT SECURITY INCIDENT DETECTION SYSTEM [[Github](#)]

- Developed an **open-source** IoT Network Security Monitoring Suite that works with open-source Chirpstack IoT server to detect over **5 common threat vectors** in IoT networks using tailored algorithms.
- Engineered a custom backend to process 5 types of IoT events, make periodic **RESTful API** calls, manage a **SQL** database of gateways and devices, and **visualize** their aggregated metrics.
- Integrated **Influxdb** for logging 3 key metrics and **Celery** for **asynchronous and scheduled task execution**.
- Orchestrated the entire ecosystem as 5 containerized microservices with **Docker Compose** for scalability.

AQUAMETRICS - IoT BASED WATER QUALITY MONITORING SYSTEM [[Frontend](#) | [Backend](#)]

- Oversaw the development of a novel IoT system to **collect, store and analyze 5 water quality parameters**.
- Managed the collected data with a **Flask-based** backend hosted on an **AWS EC2** instance, stored in InfluxDB Cloud, analyzed using custom **ML models**, and visualized via a **React Native** dashboard deployed on **Vercel**.

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, Javascript, HTML/CSS, Arduino (C/C++)

Frameworks, Libraries and Standards: Flask, Django, React, Bootstrap, Pandas, OWASP ASVS, ETSI EN IoT

Tools: Linux, Docker, Git, VS Code, AWS, Burpsuite, OWASP ZAP, Wireshark, Chirpstack, InfluxDB, Prometheus

Other: Agile/Scrum, Networking, VAPT, IoT, RESTful APIs, Router and gateway management, OWASP Top 10

CERTIFICATIONS AND TRAINING

CERTIFIED IN CYBERSECURITY



By ISC2

[View Credential](#)

GOOGLE CYBERSECURITY PROFESSIONAL CERTIFICATION



By Coursera

[View Credential](#)

SCIENTIFIC COMPUTING WITH PYTHON (🔥)

By FreeCodeCamp

[View Credential](#)

EDUCATION

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Kochi, Kerala

Bachelor of Technology in Information Technology

July 2020 - July 2024

Cumulative GPA: 9.53/10.0