# Thamaraimanalan M

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## EDUCATION

# Government College of Technology

Coimbatore, IN

Bachelor of Electronics and Communication Engineering

2022 - 2026

Cumulative GPA: 7.9 (up to Semester 6)

EXPERIENCE

Project Intern Feb 2025 – Jun 2025

FOSSEE, IIT Bombay

Report link

- Developed a cross-platform GUI for OpenModelica using Qt Framework.
- Collaborated with the FOSSEE team to improve OpenModelica's usability and performance.
- Enhanced the Qt/Python GUI's functionality and performance for OpenModelica's specific simulation and model selection processes.

## **PROJECTS**

#### Linux Device Drivers GitHub

Aug 2025 – Present

• Currently developing and learning Linux device driver modules.

## Universal Android Debloater GitHub

Jan 2025 – Present

• Cross-platform GUI written in Qt and C++ using ADB to debloat non-rooted android devices. Improve your privacy, the security and battery life of your device.

WifiJammer GitHub
Aug 2025 – Present

• Built a simple Wi-Fi jamming Linux application using the Qt Framework and the aircrack-ng suite.

#### Smart Traffic Management GitHub

Oct 2024 – April 2025

- Developed a prototype system for traffic junctions to detect emergency vehicles and prioritize their movement.
- Utilized deep learning (YOLO) for ambulance detection on Hailo 8L and automated signal control using Raspberry Pi and sensor integration.

## Project.Eye GitHub

Feb 2025 – Present

• Built an AI-powered assistive system for the visually impaired, utilizing Python, Raspberry Pi, Moondream VLM, and Piper TTS to enable real-time image capture, processing, and audio feedback via a headset.

# CERTIFICATIONS & ACHIEVEMENTS

## Qt-Athon 2024 — Global Coding Competition

Secured 3rd place for a desktop application developed with Qt Quick (QML) and C++.

Check Blog

# Comprehensive Embedded Systems Course by Pyjamabrah

Currently diving deep into low level and system software.

Certificates

# NXP AIM 2025: Regional Finalist

Developed an autonomous mobile robot using ROS2, Gazebo, and SLAM for a robotics competition.

Certificate

## TechForSociety Hackathon by Siemens and Nasscom foundations

 $Short listed\ for\ innovative\ smart\ traffic\ management\ system.$ 

#### TECHNICAL SKILLS

Languages: C, C++, Python, Shell Scripting, DSA (Learning)

Operating Systems & Kernel: Linux, Linux Kernel Development, Device Driver Development

Frameworks & Libraries: Qt, ROS2 (Learning), PyQt6 & PySide6

Developer Tools: Git, GitHub, VS Code, Qt Creator, Docker, Multipass, GDB

Embedded Systems: Raspberry Pi, Hailo 8L 13 TOPS

# SOFT SKILLS

 $\bullet$  Collaborative Teamwork  $\bullet$  Effective Communication  $\bullet$  Project Management