# **MILIND**

### **Software Developer**

https://github.com/Milind-cod3-base



### **ABOUT**

Passionate about crafting scalable and efficient software solutions by leveraging modern development methodologies.

### **EDUCATION**

Artificial Intelligence for Smart Sensors and Actuators (Master of Engineering)

**Deggendorf Institute of Technology** 

**1** 03.2022 - 03.2025

93413 Cham

Mechanical Engineering (Bachelor of Technology)

**Vellore Institute of Technology** 

**1** 07.2016 - 06.2020

♦ Vellore, Tamil Nadu, India

### **EXPERIENCE**

### **Qt Application Developer**

#### **Persystems**

**1** 01.10.2024 - 28.02.2025

- Developing Virtual Testbench, a Simulation Windows Application for industrial and automotive electric components, using C++ and the Qt Framework. Virtual TestBench is a lightweight alternative to MATLAB / Simulial
- Implemented Licence check service in the Virtual Testbench.

#### **Qt Application Working Student**

#### **Persystems**

**(1)** 01.07.2024 - 01.10.2024

- **♀** Franz-Mayer-Straße 1, 93053 Regensburg
- Created a visual nodes system where users can drag, drop, and connect various simulation electronic components with their interfaces to run the simulation using the Qt Nodes library.
- Utilizing Qt Creator as the Integrated Development Environment (IDE) for development.
- Iteratively optimising the UI and UX for better User Flow using MVC architecture.

#### Master Thesis in ADAS Virtual Validation

### **AVL Software and Functions GmbH**

**1** 01.11.2023 - 01.05.2024

 Engineered a co-simulation platform for AV ADAS verification and enhanced AVL's FMU Generation Utility to FMI 3.0 with C++ for integration with Carla and esmini, adhering to ASAM standards.

#### **Working Student**

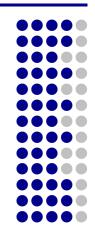
### **AVL Software and Functions GmbH**

**15.02.2023 - 31.10.2023** 

- Worked in ADAS Digitalization, focusing on engineering environments, including demonstrating SOA (Service-Oriented Architecture) with Adaptive AUTOSAR for automotives.
- Analyzed middleware technologies like ROS 2 and Adaptive AUTOSAR, and developed C++ applications and tools for Adaptive Application deployment using Azure DevOps.
- Optimized RT Linux OS via Yocto for real-time automotive systems, ensuring efficiency across ECUs.

# **SKILLS**

C / C++
Qt Framework / QML
ARM / Xilinx Zynq
STM32 / STM32CubelDE
UART / I2C / SPI
Google Protobuf
TCP/UDP/MQTT/OPC-UA
Linux / Unix
RTOS / QNX
Yocto Project
SQL
CI / CD
Git



# **PROJECT**



#### 

Developed various key ROS Nodes in C++ and Python for a Turtlebot3 autonomous driving project, leveraging ROS (Noetic) and Gazebo for a virtual testing environment via Sensor Fusion. Established and managed a CI/CD pipeline for software testing and validation against key performance indicators (KPIs). Utilized MySQL for efficient data storage, query optimization, and analysis, aiding in the improvement of autonomous driving features.

# **HOBBIES**

Video Games

Classic and Hard Rock

Cycling

# **LANGUAGES**

English German Hindi

