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
ROS2 / DDS
STM32 / STM32CubeIDE
Xilinx Zynq
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

Cycling

Classic and Hard Rock

LANGUAGES

English German Hindi

