Adithya Mohan

Date of birth: 13/08/1994 | **Nationality:** Indian | **Gender:** Male | **Phone number:**

(+49) 17647383968 (Mobile) | **Email address:** herrmohan1394@gmail.com |

Address: Ettinger Str. 18, Wohnung 8, 85057, Ingolstadt, Germany (Home)

WORK EXPERIENCE

03/2023 – CURRENT Ingolstadt, Germany
AI ENGINEER/ RESEARCH ASSOCIATE TECHNISCHE HOCHSCHULE INGOLSTADT

Project:
- End to End Development of Autonomous Driving Stack and Sensor Box as a Hardware Unit.
- Implementing Control and Deep Reinforcement Learning Algorithms for the Development of two Autonomous Cars.
- ROS/ROS2 as a Robotic nervous System / Framework
- Managing a Team of 3 and Students for Thesis.

Research:
- Improving Robustness of Deep Reinforcement Learning based Autonomous Driving focusing in Adversarial Attacks.
- Implementing ML Agorithms and developing toolkit to improve safe AI.

08/2022 – 12/2022 München, Germany
AI ROBOTICS ENGINEER FRANKA EMIKA GMBH

- Development and Implementation Learning Engine for the Robot arm.
- CMake and c++ package development.
- Machine Learning Model development.
- Writing Unit tests and Component Tests.
- SaFe guided Software Implemention.

09/2021 – 07/2022 Munich, Germany
ROBOTICS SOFTWARE ENGINEER QUANTUM SYSTEMS GMBH

- Development and Implementation of Path Planning Algorithms.
- GUI development using Pyqt.
- Development of Drone Docking station for Autonomous take off and landing for the UAV's using UR10e robot.
- Development of Robotics Software Architecture.
- Implementation of State Machines to automate tasks like Autonomous take-off and landing.
- CI/CD Implementation and developing unit test for Automation.
- Model Training to differentiate the QS Drones with other.

02/2021 – 08/2021 Neugilching, Germany
JUNIOR ROBOTICS ENGINEER ARE23 GMBH

- Ros development for the construction robot.
- Development of Pathplanning and Navigation algorithm.
- Developing URDF and xacro models for simulation.
- Machine learning model development using OpenCV, Keras and Tensorflow.
- Testing and debugging of software systems.
- Cloud Computing using AWS Robomaker and Sagemaker.
- Frontend development using React.js.
- Building and managing Backend server.
- Server setup using NGINX.

08/2020 – 02/2021 Neugilching, Germany
INTERN ARE23 GMBH

- Ros development for the construction robot.
- Developing URDF and xacro models for simulation.
- Machine learning model development using OpenCV, Keras and Tensorflow.
- Testing and debugging of software systems.

02/2020 – 08/2020 Regenstauf, Germany
MASTERAND INNOK ROBOTICS GMBH

- Development of a Continuous Monitoring tool for the robots.
- Database creation using MySQL.
- A tool designed to identify the robots error automatically.
- Running automatic analysis and visualization
- Softwares used: Python, ROS, SQL

08/2019 – 01/2020 Cham, Germany
STUDENTISCHE HILFSKRAFT - STUDENT PROJECT LEAD TECHNISCHE HOCHSCHULE DEGGENDORF

- Developed Autonomous Pick and Place Robot for the competition "Robocup".
- Lead the team of 11 students towards the completion on time.
- Sofwares used: ROS,Python,C++,XML.

07/2016 – 08/2018 Chennai, India
SENIOR ANALYST - MATERIAL PLANNER FLEX INDIA PVT INDIA LTD

- To involve in Process Automation and Kaizen.
- To manage the team to reduce the NVA in Work area.
- Suppy Chain Analytics and Data Visualization.
- Softwares used: R, Python, SQL, Tableau and VBA

EDUCATION AND TRAINING

22/03/2019 – 14/03/2021 Deggendorf, Germany
M.ENG MECHATRONICS & CYBER PHYSICAL SYSTEM Technische Hochschule Deggendorf

Address Dieter-Görlitz-Platz 1, 94469, Deggendorf, Germany | **Website** https://www.th-deg.de/ |

Final grade GPA - 1,7 | **Thesis** Thesis Topic - Development of a Continuous Monitoring tool for the robots.

05/09/2012 – 30/04/2016 Chennai , India
BACHELOR OF ENGINEERING - MECHANICAL ENGINEERING Anna University

Address Anna University, Guindy, 600025, Chennai , India | **Website** https://www.annauniv.edu/ |

Final grade GPA - 2,3

LANGUAGE SKILLS

Mother tongue(s): **TAMIL**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
GERMAN	B1	B1	B1	B1	B1

● DIGITAL SKILLS

Microsoft Office │ Programmin language PYTHON │ C++ │ MATLAB&Simulink │ Robot operating system - ROS │ AWS-RoboMaker │ AWS SageMaker │ Container (Docker) │ GIT (GitHub) │ Web Development: HTML 5, CSS, JavaScript │ JSON │ SQL/MYSQL │ ROS and ROS2