
Kshitij Prasad

Robotics Development



About

24 years old, passionate about Robotics, Avionics and Automobiles. My career goal is to solve big impact Problems and be part of the wave the Autonomous industry has caught. Graduating in 2026.

Skills

Languages - English (Native), German (B2-C1)

Tools and Frameworks - Python, C++, MATLAB, Unity, ROS2, SLAM, Path Planning, Computer Vision, Sensor Fusion, Git, Linux, Debugging, Algorithm Optimization, Analytical Skills, Team Collaboration

Contact

LinkedIn
kshitijp21@gmail.com
0176-20072984

References

Prof. Dr.-Ing. Michael Mecking
Prodekan (Elektrotechnik)

Work Experience

Intern at AKKODiS

Oct 2024 - Present

I have been involved in developing and integrating critical components for a service giveaway robot using **ROS2 environment - Nav2, SLAM, and Gazebo working with controllers, perception modules, and trajectory planners.**

I am also working with an Intel Realsense Depth Camera, and **Integration of LiDAR with real time image processing using YOLO models** to detect giveaway objects and integrate them with the Nav2 **to create custom trajectories and behaviours for object manipulation.**

I also **develop and implement custom ROS2 plugins** to enhance Nav2 features / make use-case fit for giveaways.

Werkstudent at AKKODiS

April 2024 - October 2024

Worked on autonomous navigation and perception for **TurtleBot3 using ROS2, Nav2, Gazebo, SLAM and RealSense Depth Camera**, optimizing exploration and path-planning solutions.

Implemented **Custom Behavioural Planners** and visualized them using **Simulation Tools such Gazebo, and Rviz2** and further **testing on the Real Robot.**

Assisted in business pitches, mapping market opportunities where Akkodis' Software Embedded Solutions could drive impact across industries.

Educational History

Technische Hochschule Ingolstadt Bachelor Autonomous Vehicle Engineering

(2022-Present)

Pursuing a **Bachelor's in Autonomous Vehicle Engineering at Technische Hochschule Ingolstadt**, I have gained expertise in **robotics, ROS2, AI-driven navigation, and embedded systems**. My studies focus on **robot autonomy, perception, and path planning**, complemented by hands-on projects in **simulation, SLAM, and real-time sensor integration.**

Frei Universität Berlin

T-Kurs/Studienkolleg

(2021-2022)

Attended a Bridging Course required by International High School Diploma graduates to attain German 'Abitur'.

Projects

Schanzer Racing Ingolstadt

Driverless Engineering

Oct 2022 - Oct 2024

At **Schanzer Racing Formula Student**, I worked with **Matlab, C++, and ROS2** on **differential drive robotics**. I also helped select **LiDAR solutions** and managed **budgeting** for technical components

Pixel Park

Hackathon

November 2023

At **Pixel Park**, we developed a **LiDAR-based parking detection system** to identify and map available spots, reducing **search time and CO2 emissions**. I worked on **sensor calibration, software integration, and GUI development**, ensuring accurate detection and a seamless user experience.