

Daniel San José Pro



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 daniel-san-jose-pro | Website

Aspiring Robotics Engineer with a solid foundation in **ROS2, Python, and C++**.

Since 2021, I've gained hands-on experience through research groups, startups, and leading European universities.

My core expertise lies in **robotic manipulation for learning based control** using Universal Robots UR3 and Franka Emika FR3, as well as **mobile robot navigation**.

Professional Experience

Learning Systems and Robotics Lab, TUM ROBOTICS RESEARCH ASSISTANT

Munich, Germany
Apr 2025 - Now

- Design of force-based teleoperation systems for Franka Robotics FR3 manipulators.
- Software Design ROS2 controllers and packages for learning-based policies on real hardware.
- 3D printing and design of grippers and teleoperation tools.

ROS2 C++ Python Teleoperation 3D-Printing Learning Based Control Franka Robotics FR3

Fraunhofer Institute of Cognitive Systems (IKS) STUDENT RESEARCH ASSISTANT

Munich, Germany
May 2024 - Apr 2025

- Training and deployment of RL policies in simulation (MuJoCo).
- Sim2real transfer on UR3 for pick-and-place tasks.

ROS2 C++ Python Reinforcement Learning MuJoCo Universal Robots UR3

Angsa Robotics GmbH ROBOTICS ENGINEER

Munich, Germany
Apr 2021 - Dec 2023

Angsa develops an autonomous trash picking robot for green spaces.

- Development of the robot software stack for a wheeled robot based on **ROS2 using Python, C++, and C for micro-ROS**.
- Deployment and testing of the robot in simulation and real environment.
- Bachelor thesis in optimal coverage path planning for outdoor navigation.
- Implementation of an intelligent object-picking process for an autonomous trash-collecting robot.
- Setup of the CAN network for the driving system of the robot.

ROS2 C++ Python Navigation Behavior Trees

Education

Technical University of Munich (TUM) MASTERS OF SCIENCE IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Munich, Germany
2018 - 2020

Average grade: 1.1. Focus in Robotics, Control Theory, and Machine Learning.

ETH Zürich EXCHANGE SEMESTER IN ZÜRICH

Zürich, Switzerland
2021

Courses in Theory of Robotics and Mechatronics, Dynamic Programming and Optimal Control, High Performance Computing in Science and Engineering, Introduction to Aircraft and Car Aerodynamics and Discrete and Statistical Signal Processing.

KTH Royal Institute of Technology EXCHANGE SEMESTER IN STOCKHOLM

Stockholm, Sweden
2023

Average Grade: A. Courses in Model Predictive Control, Deep Learning, Applied Estimation and Reinforcement Learning.

Skills

- **Tech Stack** — ROS2 | Python | C++ | 3D-Printing/CAD | Docker | UNIX/Linux
- **Languages** — fluent in German, Spanish, French, and English.