Diploma Thesis/Working Student Position (m/f) on an Indoor Mapping Simulation Pipeline at successful high-tech start-up

We are NavVis – proud to be recently named Munich‘s best start-up

NavVis builds the world’s most advanced 3D mapping system, the browser-based IndoorViewer, and a game-changing indoor navigation app based on computer vision. We are a young, enthusiastic team from global top-tier institutions (Stanford, Harvard, Microsoft, McKinsey) and we love challenging tasks. You’ll get a supportive environment, lots of responsibility and room for personal development from day one.

NavVis is located close to Stiglmaierplatz in the heart of Munich, Germany. We believe in flexible working hours and run awesome team events. Our interdisciplinary culture aims to bring out the best of everyone and we are looking to quickly grow our team of currently 50 amazing individuals

We are a top-funded start-up backed by renowned international venture funds and honored with numerous awards!

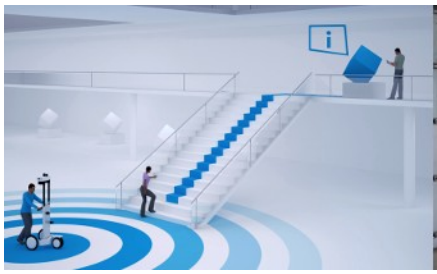
Your role:

Our indoor mapping solution is based on state of the art SLAM-Algorithms, utilizing a variety of high tech sensors like multi layer laser scanners, cameras and IMUs to estimate the trajectory of our mapping device while at the same time generating a highly accurate map of the indoor environment. In order to effectively evaluate and compare the performance of different localization and mapping algorithms, reliable ground truth data is required. A good approach to obtain this data is by simulation, where the sensor data is synthesized from a virtual environment. We therefore are looking for a motivated student to work on our simulation pipeline. This includes the design and implementation of simulation tools as well as the comparative evaluation of different mapping algorithms using the generated simulation data.

Your profile:

- Solid skills and practical experience in C++ (required)
- Knowledge in mobile robotics and/or SLAM algorithms
- Experience with ROS (would be nice)
- Experience with python (would be nice)
- Knowledge in 3D computer graphics (would be nice)

We’re looking forward to your application (cover letter, CV, certificates) to position@NavVis.com



Indoor mapping

M3 mapping trolley

Virtual tours and navigation