

JOB DESCRIPTION

INDOOR LOCALIZATION OF PERSONS USING 3D CAMERAS

Beginning: Now
Employment Type: Master Thesis / Internship
Location: Karlsruhe, Baden-Württemberg, Germany



COMPANY DESCRIPTION

Rüdenauer 3D Technology GmbH - RU3DENAUER - is a technology spin-off in the area of virtual reality from Karlsruhe Institute of Technology (KIT). We are developing an innovative virtual reality platform that connects several globally distributed users in one virtual room. At RU3DENAUER you get the chance to work in an emerging market and realize new ideas using latest technologies in product development. We're a highly motivated team looking for enthusiasts, techies and specialists to join us!

EXPECTATIONS AND TASKS

In order to avoid a collision between persons in a VR session, the physical motion and movements of the participants have to be tracked. Within the master thesis, a robust algorithm for an exact determination of person's position using point clouds shall be developed. 3D cameras are installed stationary in the configuration room and provide a real-time stream of a point cloud. The localization shall be realized using an adequate filter (EKF, or similar). After signal smoothing, a dynamic image transfer without delay shall be provided.

This job advertisement is also available for an internship at the university campus.

EDUCATION AND QUALIFICATION / SKILLS AND COMPETENCIES

- Student in Mechanical/Electrical Engineering, Information Technologies or similar specialization
- Good skills in C programming and/or an object orientated programming language (Java or C#)
- Experience in machine vision would be desirable
- Self-reliant, solution-oriented way of working with outstanding team skills
- Very good problem-solving skills and analytical abilities
- **Enthusiasm and Motivation**

WE OFFER

attractive working environment – great team spirit – professional dev. teams – personal skills development – free coffee

Your set of application documents should contain a cover letter, a resume in table form, school leaving certificates, current university transcript of records, copies of any academic degrees already earned, and if available, references from former employers (including internships). Please describe as well your experience and skills in computer programs/ programming languages.

Please apply directly at: Andreas Rüdenauer | andreas.ruedenauer@r3dt.com | +49 721 608 45381

EXPERIENCE THE FASCINATION OF VIRTUAL REALITY