EXTEND3D
www.extend3d.de

Projective WERKLICHT® Augmented Reality systems from EXTEND3D meet the highes demands in prototyping, assembly and quality assurance. With the unsurpassed dynamics of this „digital template“ we deliver the right answer to challenges that arise from the continuing trend to ever greater variant diversity and ever shorter product and innovation cycles. With our innovative technology we could contribute to spectacular projects such as in the E-Mobility of tomorrow, in motor racing, in painting of cruise ships or in aircraft construction.

We are a dynamic team with flat hierachies and are looking for highly motivated, open-minded personalities seeking for a new challenge in a vibrant environment and and want to play an active part in shaping the processes of tomorrow with their creative ideas.

Working student or Bachelor-/Master Thesis project: Interaction detection and projection using ROS2 for Industrial Spatial Augmented Reality (ISAR).

Processes can be created and adhered to during production but documenting and intuitively guiding workers through the process are still challenging in modern augmented reality applications. Implement techniques with which the interaction can happen on the work piece instead of on a nearby computer. Bring interaction to life with accurate dynamic projections.

Integrate and test different state-of-the-art interaction detection mechanisms in ROS2 by developing an interactive industrial prototype. Analyze the achievable speed and accuracy at runtime, as well as the robustness under varying environmental conditions. Finally, evaluate the setup/training effort required.

Your profile:

- C++ programming skills (C++, ROS, STL, Boost, OpenGL)
- Interest in Augmented Reality
- Basic understanding of image processing and 3D coordinate transformations or motivation to learn it
- Motivation and endurance

Interested?
Send your application to nicolas.heuser@extend3d.de