



Development of Virtual Reality (VR) Use cases for Knauf's product portfolio & tests

About Knauf

Knauf is a multinational, family-owned manufacturer of building materials. The headquarter is located in Iphofen. Knauf generates over 15 billion Euro in sales from manufacturing construction materials for drywall construction, plasterboard, cement boards, mineral fiber acoustic boards, dry mortars with gypsum for internal plaster and cement-based external plaster and insulating materials but also glass wool, stone wool, and other insulation materials.

VR @Knauf

As part of the innovation, Knauf takes the next step by implementing VR into Knauf's tests and products. It is always better to have a visual understanding of something than to describe it. Through this VR implementation in Knauf products, we will provide a unique visual representation of Knauf products to all our customers. Initially, we would like to start with the implementation of VR in drywall fire protection tests, which will be extended to other departments and products in the near future.

Your task

- Requirements for VR implementation - Hardware (VR headset) & Software – Help Knauf to understand the best possible VR headset available in the market suitable for this specific project
- **Main task:** Develop a software which can be connected to the VR headset to visualize the VR world
- **Idea:** capturing the fire test video and implementing it into the software that will later be visualized through the VR headset
- Using different fire test videos in the same software so that the customers can visualize the products they're about to purchase
- Show the variations in the drywall properties throughout the test (as a description) – e.g. properties of drywall change with increase in temperature
- Provide a good understanding of the software to the responsible Knauf department
- Share additional ideas that can be included in this project

Your profile

- You should be a team of 2 to 5 students in your Bachelor or Master studies
- You should be ready to start this project study in Winter Term 2023/2024
- You should have solid German and English skills as well as analytical knowledge
- You are dedicated, motivated and passionate

Your benefits

- Work closely together with Digital experts at Knauf's Digital Hub, driving digital projects throughout the organization globally
- Get first-hand experience to understand how manufacturing firms implement digitalization initiatives
- Work independently in a project-based setting with continuous support by Knauf experts
- Gain a head-start at beginning your career at Knauf

Your application

Please direct your team's application (including a joint cover letter, CVs, transcripts and relevant references) to Andreas Kronthaler, your point of contact at Knauf. Feel free to reach out in case of any questions. We are looking forward to your application.

- Andreas Kronthaler (andreas.kronthaler@knauf.com)
- Marc Mehrer (marc.mehrer@tum.de)