The Institute of Visual Computing and Human-Centered Technology at TU Wien (Vienna, Austria) offers a research assistant / PhD position in the field of computer graphics. The main research area is geometry reconstruction from 3D scan data.

**Vision:** reconstruct a model of the world that permits online level-of-detail extraction. The core idea in this project is to interactively integrate sensed 3D data of varying sources and scales into a topologically clean surface. Our varying-scale model then permits online extraction of seamless levels of detail for rendering with minimal aliasing and popping artifacts. The integration of sensor noise allows for robust change detection. Further applications could be autonomous navigation by fusing scans of multiple vehicles, deep learning to improve scene understanding, or interaction with virtual objects in mixed reality. For more information about our WWTF funded project see here: [https://www.cg.tuwien.ac.at/research/projects/WorldScale/](https://www.cg.tuwien.ac.at/research/projects/WorldScale/)

This project permits a student to do research according to their own interests within its context.

The PhD student will be jointly supervised by Prof. Michael Wimmer and Dr. Stefan Ohrhallinger. Currently, there are about thirty people including professors, PhDs and graduate students working at our institute. We provide a very stimulating and highly enjoyable working environment in a competitive, internationally oriented research group. The gross salary is €41,000/year [1] and the position is up to 3 years and 4 months. We are looking for a motivated young scientist who can start from 1.5.2020 or later that year.

Applicants must have a Master's degree or equivalent in computer science or related fields, preferably with good knowledge in the fields of computer graphics, computer vision or geometry. Solid programming skills (C++) and spoken/written English are required. Prior involvement in research projects or experience with GPU programming or geometry libraries is a plus.

Please send your application including a motivation letter, a full CV including theses, publications, talks and projects, as well as copies of university certificates and three references which we can contact, or any questions related to the application process or qualifications to Stefan Ohrhallinger: ohrhallinger@cg.tuwien.ac.at until 31.3.2020.

More on our Rendering and Modeling group here: [https://www.cg.tuwien.ac.at/renderinggroup](https://www.cg.tuwien.ac.at/renderinggroup)