



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



The Computer Vision Laboratory at ETH Zurich is currently offering a position as

Software Engineer

for a project in collaboration with its spin-off company Virtamed AG on patient-specific model generation for surgical training simulation. The position is open immediately for a duration of 24 months.

To date, anatomical scenes for surgical training have usually been modeled manually, which is a costly and time-consuming process and therefore limits rapid development of new surgical procedures. Furthermore, it may also impede potential applications of surgical simulation, for example in pre-operative planning. The ultimate goal of this project is to develop a framework that would allow a skilled operator to generate various anatomical scenes from medical data in short time. The work will focus on framework development and integration related to user-controlled interactive segmentation and registration of 3D patient datasets, refinement and adaptation of model geometry, and appearance modeling.

Your profile

- University degree in computer science or related fields
- Solid knowledge and experience in software development in C++
- Basic knowledge in computer vision & computer graphics
- Good level in English, both written and spoken

The Computer Vision Laboratory at ETH Zurich has many years of experience in research related to surgical simulation and provides an excellent work environment with a number of thematically related co-workers. Virtamed AG was founded in 2007 and focuses on the commercialization of surgical simulation systems. We offer interesting and project-oriented scientific work in a modern and well-equipped environment. The successful candidate will join an interdisciplinary group of scientists performing cutting-edge research related to surgical simulation.

You will be responsible for framework development and integration of existing and novel research results. This responsible position offers you the chance to work at the interface between cutting-edge research and a highly dynamic start-up company. We search for a pragmatic, solution- and team-oriented, creative co-worker who is also interested in collaborating with a dynamic company with start-up groove

Candidates should send electronically their curriculum vitae, graduation information, letters of recommendation to Matthias Harders.

PD Dr. Matthias Harders (mharders@vision.ee.ethz.ch), Computer Vision Lab, ETHZ
Dr. Denis Steinemann (steinemann@virtamed.com), Virtamed AG.