ISMAR 2017 – „Pitch your lab" proposal

The institute DFKI and the Department "Augmented Vision"

The German Research Center for Artificial Intelligence (DFKI) GmbH was founded in 1988 and is the leading, non-profit-oriented research institution in the field of innovative software technology based on Artificial Intelligence methods (AI) in Germany. With more than 450 employees and an annual turnover of over 40 million euros, it is currently the world's largest research centre in the field of artificial intelligence. The institute is located on 5 different sites across Germany (Kaiserslautern, Saarbrücken, Bremen, Osnabrück and Berlin). The department "Augmented Vision" is located in Kaiserslautern, in the West of Germany.

The research in the department "Augmented Vision" covers the areas of computer vision, virtual and augmented reality, sensor fusion as well as human-machine interaction. The group consists of about 30 researchers, with approximately 80% of PhD students. The department is involved in a large number of major national and international research projects, often as coordinator. The activities range from basic research to the development of specific prototypes for industry and cover both software and hardware.

Prof. Didier Stricker, head of the department "Augmentd Vision", scientific director at the DFKI, and full professor at the University of Kaiserslautern, has been working on topics of augmented reality for more than 15 years. He chaired the first IEEE & ACM International Symposium on Mixed and Augmented Reality (ISMAR) in 2002 and was a member of the ISMAR Steering Committee from 2000 to 2007. He initiated the first German projects on Augmented Industrial Reality (e. g. ARVIKA (1999-2003), ARTESAS (2004-2008), AVILUS (2009-2011), ARVIDA (2013-2016)), and was involved in numerous European AR projects (e. g. ArcheoGuide (2000-2002), MATRIS (2004-2007), LARA (2015-2017)). Prof. Stricker supervised 14 completed and 21 ongoing doctoral theses on image processing, sensor data fusion, machine learning and extended reality.

The department "Augmented Reality" develops tracking and pose estimation methods for different sensor types (classical color or grayscale cameras, depth cameras, individual inertial sensors and inertial sensor networks) as well as for sensor combinations through sensor data fusion. Our tracking algorithms are designed for real-time applications and are optimized for low computing effort and low latency.

Open positions:

We are currently hiring Researchers and Software Engineers. The open positions are:

- Researcher (m/f) in the area of 3-D Computer Vision
- Software developer (m/f) in the area of 3-D computer vision, computer graphics and visual computing
- Researcher (m/f) in 3-D Computer Vision and SLAM for Augmented-Reality Applications
- Software engineer (m/f) in 3-D Computer Vision and SLAM for Augmented-Reality Application

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