

# LATEST ADVANCEMENTS IN COMPUTER ASSISTED OPHTHALMIC SURGERY

**M Ali Nasseri, Mathias Maier and Chris P Lohmann**

Augenklinik und Poliklinik, Klinikum rechts der Isar der Technische Universität  
München, München, Germany

**C**omputer assisted surgery has found its way into ophthalmic procedures in the recent years. In this talk we will discuss computer based approaches with promising solutions for ophthalmic surgery challenges. These approaches include: robotics and smart instrumentation; augmented reality; machine learning; and deep learning. Within this talk, we will investigate state of the art solutions and their potentials to improve the procedures in future. Furthermore, we discuss the challenges including clinical compatibility and training aspects in order to detect obstacles that make translation of these technologies slower.

[ali.nasseri@mri.tum.de](mailto:ali.nasseri@mri.tum.de)