Master Thesis in Visual Computing: 
*Face Tracking and Facial Reenactment*

The goal of this thesis is to explore the space of face tracking with RGB and RGB-D cameras. To this end, a statistical model of the face is utilized whose parameters are obtained at runtime using a continuous optimization approach and/or a data-driven machine learning technique. Having a reconstructed face, a large variety of applications, such as facial reenactment or virtual character animations, can be realized.

Milestones:
1) Keypoint-based face detector
2) Blendshape non-linear least squares fit
3) Character and reenactment application

Pre-requisites: Strong C++, graphics and vision background, highly self-motivated 😊

References: Face2Face [https://www.youtube.com/watch?v=ohmajJTcpNk](https://www.youtube.com/watch?v=ohmajJTcpNk)

If you are interested, please contact Matthias Niessner (matthias.niessner@tum.de).