

Student assistant / HiWi (f/m/div) for a project on recognizing Microaggression

The Max Planck Institute for Intelligent Systems (MPI-IS) conducts research to understand the principles of perception, action, and learning in natural and artificial systems that successfully interact with complex environments.

The Optics and Sensing Laboratory at the Max Planck Institute for Intelligent Systems in Tübingen has an open position for a student assistant (HiWi) to join an ongoing collaborative research project with the Organizational Leadership and Diversity Group of MPI IS Stuttgart on recognizing microaggression at workplaces.

Using unique 3D & 4D capture facilities and computer vision methods, we analyze non-verbal behavior and movements of humans and animals. We develop algorithms to estimate human shape and motion in images, videos, and RGB-D sequences. Our approaches define the current state of the art, and we are constantly improving these methods and systems to achieve better accuracy

About the project:

The project aims to detect and analyze micro aggressive behaviors and create a database containing a variety of non-verbal/verbal reactions to microaggressions. This will ultimately help to develop ML algorithms that will be able to detect reactions and develop strategies to reduce negative impacts of microaggression at workplaces.

Optics and Sensing Laboratory website: https://is.mpg.de/en/optics-sensing-laboratory

Organizational Leadership and Diversity website: <u>https://ld.is.mpg.de/</u>

Your tasks:

- Create a photo-realistic, fully-rigged human avatar that serves as an 'aggressor' using Metahuman Creator Tool
- Set up the human avatar to interface with predefined scripts that defines behavior and/or movement sequences
- Train other members of the project to control the avatar
- Assist the analysis of the avatars' realism by conducting perception studies
- Extend the control of the avatar for real-time application

Your profile:

- Experience in Animation & Programming
- Good oral and written communication skills in English
- A natural team player and detail-oriented person
- Duration of minimum 6 months, minimum of 15 hrs./week

Good to have:

- Familiarity with Unreal and Metahuman
- Experience in programming languages including C++ and Python

We offer:

- The opportunity to work in a multidisciplinary collaboration project at MPI for Intelligent Systems (Tübingen and Stuttgart)
- An open-minded and motivating working environment
- The possibility for a hybrid working condition
- Potential co-supervision of a master thesis in computer graphics/programming

Students can earn up to €13.03 per hour, depending on their qualifications. The maximum possible working hours for students per week are 20 hours.

Contact and application:

To apply, please submit

- a CV (2-4 pages)
- a short motivation letter (why you are interested in this position/research)
- examples of relevant past work as a link (e.g. in animation or programming)
- two references (contact information including name, affiliation, email address)

Please prepare these documents in English and upload them as one PDF file to our <u>application</u> <u>portal.</u>

Only complete applications can be considered. The position will be open until filled.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.



Any questions regarding this position can be addressed to Dr. Senya Polikovsky (<u>senya.polikovsky@tuebingen.mpg.de</u>) or Dr. Keiko Kitagawa (<u>keiko.kitagawa@tuebingen.mpg.de</u>).

If you prefer to send a hard copy application, please send it to: Max-Planck-Institut für Intelligente Systeme Keiko Kitagawa, Max-Planck-Ring 4, 72076 Tübingen

