Max-Planck-Institut für intelligente Systeme

Student Assistant (HiWi) f/m/div

Online seit 07.11.2025 | 2025-11-07-944552 | Studierendenjob

Stellenbeschreibung

The Max Planck Institute for Intelligent Systems (MPI-IS) conducts research to advance intelligent systems that perceive, learn, and interact. Through fundamental research across computational, physical, and social dimensions, we shape artificial intelligence and robotics to advance knowledge and benefit society.

The Robotic Materials Department at the institute's Stuttgart site is looking for a

Student Assistant (HiWi) f/m/div

Starting as soon as possible.

About us

High-performance artificial muscles provide new opportunities for the field of robotics:

The Robotic Materials Department at the Max Planck Institute for Intelligent Systems, led by Prof. Christoph Keplinger, aims to fundamentally challenge current limitations of robotic hardware, using an interdisciplinary approach that synergizes concepts from soft matter physics and chemistry with advanced engineering technologies to devise robotic materials that enable creation of intelligent machines that mimic the astonishing capabilities of organisms in nature.

One of our central goals is the development of new classes of actuators – a key component of all robotic systems – that replicate the sweeping success of biological muscle, a masterpiece of evolution featuring astonishing all-around actuation performance, the ability to self-heal after damage, and seamless integration with distributed sensing. Our fundamental research aims to allow practical applications for soft robotic systems that span from industrial automation, over medical and wearable robotics all the way to new types of human-machine interfaces.

Department website: https://rm.is.mpg.de/

Department videos: https://www.youtube.com/@RoboticMaterials

Roles & Responsibilities

The student assistant position is paid hourly and will allow the student to gain hands-on experience with hardware systems, as well as to be exposed to ongoing robotics research. The position and tasks are subject to discussion with the interested candidates. Selected candidates can start working as soon as they are hired.

Possible tasks include:

- Fabricating film based soft actuators
- Optimizing the fabrication processes
- Testing the actuators and evaluating their performances
- Optimizing designs of the actuators
- Scaling up the fabrication technique for large area application (e. g. wearable device)

Anforderungsprofil & Qualifikationen

Education & Experience

We are looking for talented students who are pursuing a Master of Science in robotics (Robotik), material science (Materialwissenschaften), biomedical engineering (Medizintechnik), mechanical engineering (Maschinenbau), electrical engineering (Elektrotechnik), physics (Physik) or related fields to support our research as student assistants (HiWis), and to shape the future of robotics with us.

Applicants should:

- Have high motivation
- Be pursuing a bachelor's or master's degree
- Be currently enrolled in a German university
- Have strong academic performance in relevant bachelor's and master's courses
- Want to work in an international and interdisciplinary research group
- Have good oral and written communication skills in English
- Be able to work on site at the Max-Planck Institute for Intelligent Systems in Stuttgart, Germany, at least for a part-time employment

We are especially interested in applicants who have

- experience in engineering drawing (2D CAD) and designing experiments
- interest and/or experience in
  - rapid prototyping techniques (3D CAD, CNC, laser cutter, 3D printer, screen printing etc.)
  - handicraft
  - process optimization
  - developing a wearable device
- Inclination to hold this appointment for over 6 months

Our offer:

Master students holding a Bachelor's degree will be paid 14,40 € per hour, minimum 16 hours to maximum 20 hours per week. The job will start as soon as possible.

We offer a modernly equipped workplace, a strongly international working environment, as well as the affiliation to a daycare center for young children.

Application:

Please upload your application including a resumé in English or German and a cover letter in English to our application portal.

For further questions, please contact Xiang Shi at xiangshi@is.mpg.de or Ye Jin Park at ypark@is.mpg.de

Closing date for application: 30.11.2025

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. The Max Planck Society strives for gender equality and diversity. Furthermore, the Max Planck Society seeks to increase the number of women in its workforce in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Stellenmerkmale

Beschäftigungsart	**Studierendenjob**
Beschäftigungsumfang	**Teilzeit (befristet)**
Home Office	**Nein**
Bewerbungslink	**https://formular.as-mediendesign.de/link/af3fd5c5-41890-386-e075c3.html**

Kontaktdaten

Firma/Hochschule	**Max-Planck-Institut für intelligente Systeme**
Kontakt	**Herr Xiang Shi**
E-Mail	**xiangshi@is.mpg.de**