

Stellenausschreibung – Job posting

An der Fakultät für Informatik der Technischen Universität Wien gelangt nachstehende Stelle zur Besetzung:

Die TU Wien strebt eine Erhöhung des Frauenanteils insbesondere in Leitungsfunktionen an und fordert daher qualifizierte Frauen ausdrücklich zur Bewerbung auf. Bei gleicher Qualifikation werden Frauen vorrangig aufgenommen, sofern nicht in der Person eines gleich qualifizierten Mitbewerbers liegende Gründe überwiegen. Wir sind bemüht, Menschen mit Behinderung mit entsprechender Qualifikation einzustellen und fordern daher ausdrücklich zur Bewerbung auf. Bei Rückfragen wenden Sie sich bitte an die Behindertenvertrauensperson der TU Wien, Herrn Gerhard Neustätter.

At the **Institute of Visual Computing and Human-Centered Technology**, in the **Research Unit of Artifact-based Computing & User Research**, TU Wien is offering a position as a university assistant (prae-doc) limited wo expected 4 years for 40 hours/week.

Do you have a passion for robotics and AI and you want to make an impact? Are you interested in designing and building autonomous robots that can better support people in their daily lives? If so, this might be for you! We are looking for a highly motivated PhD student who has a passion for building interactive robots and drones, and for creating new interfaces between humans and autonomous systems.

In recent years, aerial robots (a.k.a. drones) have emerged as critical tools in disaster management efforts. Their ability to access difficult-to-reach places has made them especially valuable for supporting first responders, such as by surveying and gathering data, as well as supporting victims by, for instance, delivering essential supplies. Yet, the support provided by drones remains limited to their conception as remote aerial sensors or automated delivery vehicles. You will explore the untapped potential of drones to better support people (i.e., first responders and victims alike) by designing, developing, and evaluating human-machine interfaces for collocated human-drone interaction.

Tasks:

- Your task will consist in implementing a series of human-machine interface prototypes (software and hardware) for automated drones in an emergency context. You will work following a human-centered design process. Part of your work will consist in running user studies with various stakeholders using both quantitative and qualitative research methods. Some of the studies will take place in a laboratory, while others will take place in the wild. Your role will then be to analyze the data and use the results to iterate future versions of your prototype. You will work both independently and as part of a team and you are expected to bring both rigor and creativity to the project.
- You will collaborate on research and teaching tasks as well as examinations. You will guide students and participate in research and project activities. You will write your dissertation and scientific papers while also participating in scientific events. You will assist and collaborate in organizational and administrative tasks.

Your profile:

- Completion of a master's or diploma degree in Computer Science or similar fields
- Experience in Human-Robot Interaction, Robotics, or Mechatronics
- Strong motivation to do research and interest in robotics and new technologies (e.g., participation in challenges or robotic competitions)
- Confidence in working both independently and collaboratively
- Strong technical skills. Including, but not limited to: the ability to program in one or several programming languages (e.g., Python, C/C++, ROS, Arduino, Ardupilot)
- Proficiency in analyzing data and statistics
- Interest in research in the field, as well as supervision and work with students
- A can-do attitude and hands-on creative technologist
- Excellent spoken and written communication skills in English and German
- Very good communication, teamwork, and innovation skills



We offer:

- A wide variety and exciting range of tasks in a collegial team
- Flexibility in working time arrangements
- A range of attractive social benefits (see <u>Fringe-Benefit Catalogue of TU Wien</u>)
- Wide range of internal and external training opportunities, various career options
- The central location of the workplace as well as good accessibility (U1/U4 Karlsplatz)

Entry level salary is determined by the pay grade B1 of the Austrian collective agreement for university staff. This is a minimum of currently EUR 3,578,80/month gross, 14 times/year for 40 hours/week. Relevant working experiences may increase the monthly income.

Applications written in Englisch must include the following documents:

- Curriculum vitae
- Cover letter including a brief statement introducing yourself and describing why you are interested in joining us for a PhD
- Grade report
- Title/topic of Master's thesis (if available)
- Accomplishment letter: Please share three accomplishments you are most proud of; It can be anything that demonstrates your technical capabilities, such as: any software or hardware artifact you created, artwork portfolios, mobile apps you designed and/or published in a market, and hackathon outcomes; If you worked as a group, please clarify what role you took and what contributions you made to each project

For content-related questions please Prof. Dr. Jessica Cauchard, jessica.cauchard@tuwien.ac.at

We look forward to receiving your application until November 21, 2024 on our job platform: <u>https://jobs.tuwien.ac.at/Job/242606</u>