

The Peter L. Reichertz Institute for Medical Informatics (PLRI) of TU Braunschweig and Hannover Medical School is seeking for a

Research Assistant / Postdoc (m/w/d)

in

Digital Rescue Sheet (DiRect)

The Institute

PLRI is a joint institute of TU Braunschweig and Hannover Medical School, and one of the largest university-based centers for medical informatics in Germany. As an academic institution belonging to two leading universities, comprising an institute of technology and a medical school, located in one of Europe's most research-intensive regions, PLRI offers excellent research opportunities. We collaborate in interdisciplinary projects with healthcare centers, research institutes, enterprises, and public organizations in order to shape the future of healthcare and medicine. Our activities range from the local level, as with institutions in Braunschweig and Hannover, to regional, national, and global corporations. Currently, the PLRI's Executive Director is the President of the European Federation of Medical Informatics.

The Position

The position is open since the announcement and is limited to a period of five years. Earning a Ph.D. or habilitation is possible. Depending on your qualification and fulfillment of personal requirements, the remuneration is based on the salary level TV-L E13. International applicants will need to complete a visa process before hiring can take place. The position is based at PLRI Campus Braunschweig. The workplace is basically part-time suitable but should be 100 percent occupied.

Your Challenges

Accident and emergency informatics is a novel and trans-disciplinary field of research that we have established at PLRI. In the DiRect project, we are transforming so far paper-based information sheets provided by car manufacturers into a digital and three-dimensional application installed on portable devices by the rescue teams. Besides the interactive 3D visualization, we aim at (i) navigation (where to cut for emergency release), (ii) automatic vehicle identification (using the eCall system, QR codes, photographs, or from the license plate), (iii) vehicle deformation estimation (based on crash data from the car's CAN bus), (iv) personalized injury estimation of vehicle occupants (depending on their seat position and mechanical crash parameters), (v) establishing a comprehensive accident registry, and (vi) integration towards automatic eCall generation with ISAN integration.

Your Profile

We are seeking outstanding candidates that have:

- completed, or are in the process of completing either a Master's degree or a Ph.D. in (mechanical) engineering or computer science,
- programming skills and experience in software development,
- experiences with 3D models, modeling, and visualization in Blender
- experience in research and outstanding published works,
- excellent oral and writing skills in English (German language skills are advantageous),

- willingness to work closely with the interdisciplinary project team, and
- self-initiative and result-oriented working approach.

Application Process

Please prepare your application documents in German or English as a combined PDF document consisting of

- a cover letter (including your motivation),
- a CV,
- your academic performance record (your grades during your Bachelor's and Master's studies including grading scale details),
- a proof of your language proficiency, and
- a copy of your Master's thesis or comparable student theses.

Please upload the documents at <https://drop.plri.de/> and send the link by e-mail to Prof. Thomas Deserno. Review of applications will begin with submission and will continue until the position is filled. Reimbursement of application costs is not possible.

TU Braunschweig is an equal opportunity employer and all qualified applicants will receive consideration for employment regardless of race, color, religion, sex, sexual orientation, gender identity, disability status, or any other characteristic protected by German law. Further, TU Braunschweig aims to increase the share of women in academic positions and therefore particularly welcomes applications from women. Severely disabled persons are entitled to special consideration (proof must be enclosed). During the application process, personal data will be stored electronically.

For further questions, please contact:

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