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RE: Research Position – Master Student

At the Institute of Networks and Security (<https://ins.jku.at>) at Johannes Kepler University Linz, we are looking to strengthen our project research team starting immediately. The Digidow research laboratory (<https://ins.jku.at/research/projects/digidow>) aims to develop architectures, protocols, and prototype implementations for future privacy-first digital identity for interactions in the physical world (e.g. door access control, border checks, public transit ticketing, or age verification). Our core project team should be strengthened by part-time (up to 20h/week) student developers aiming to complete a Master's thesis in combination with their project work. We offer a variety of different research and development focus areas including cryptographic protocol design and verification, secure code implementation and analysis with different languages, private location tracking and behavioral modelling, as well as biometric authentication. The project aims to create concrete prototype implementations in a living laboratory setting to demonstrate practical applicability.

Job Duties:

- Evaluate, implement, and analyze security and/or privacy mechanisms (e.g. differential privacy, federated zero knowledge approaches, compiler based/static/dynamic code analysis, local/private location tracking models, formal protocol and code verification, metadata-hiding distributed networking, etc.)
 - Contribute to publications in journals or conferences
 - Complete a Master's thesis (highly desired)
- Contribute to project management and administrative tasks

Your Qualifications:

- The successful candidate must hold a Bachelor's degree in Computer Science or Software Engineering
- Excellent programming skills, particularly with Java, C++, and/or modern systems languages like Kotlin or Rust
- Deep interest in computer security and privacy
- Excellent command of English and willingness to learn German

The minimum salary for a part-time (20h/week) position in accordance with the collective agreement is € **1030,80** gross per month (14 x per year, CA Job Grade: **IIIa**).