Student assistant position: Implementation of secure computations

The *CloudDBGuard* project is funded by DFG (Deutsche Forschungsgemeinschaft) with the main purpose to implement cryptography-based approaches to secure data management in cloud databases.

Your tasks:

- Your main task is to apply fully homomorphic encryption libraries on unsupervised machine learning algorithm (called Biclustering Algorithm)
- Analyzing homomorphically implemented machine learning algorithm in respect to encrypted resulting biclusters
- Installing any required softwares or libraries
- Benchmark system with large scale gene expression data sets

Your profile:

- You are studying computer science or a comparable field of study
- Good knowledge of Linux
- Good knowledge in a programming language like Python
- Good knowledge of English
- You are curious about new technologies & motivated to bring projects to success together with the team
- Nice to have knowledge of: cryptosystems techniques (like Fully homomorphic encryption) or machine learning algorithms (like clustering)

Apply now by sending us your up-to-date CV to <u>VahidianSadegh@mathematik.uni-frankfurt.de</u> We are looking forward to your application.

Why work with us?

- You contribute to a very demanding topic that could impact the analysis of highly confidential genomics data
- You can develop and implement your own ideas
- You can work independently and flexibly
- Academic and research-oriented working environment
- Opportunity to employ your gained experience towards thesis and projects.
- Opportunity to contribute to group research papers in workshops, conferences, and journals.
- Corporate Benefit Advantage Platform

Contact:

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