

We're Hiring



TECHNISCHE
UNIVERSITÄT
DARMSTADT

Doctoral Researcher (Research Assistant / PhD Student) in Cryptography and Privacy Engineering



The *Cryptography and Privacy Engineering Group* ([ENCRYPTO](#)) at the [Department of Computer Science](#) of the [Technical University of Darmstadt](#) offers a *full position as doctoral researcher* to be filled as soon as possible and until June 30, 2026 with the possibility of extension.

What this job is about

You will be working in the collaborative research center [CROSSING](#) funded by the German Research Foundation (DFG). In our sub-project E4 Compiler for Privacy-Preserving Protocols, we build compilers to automatically generate optimized secure multi-party computation protocols for privacy-preserving applications. See <https://encrypto.de/CROSSING> for details on our sub-project.

As a doctoral researcher at ENCRYPTO, you will conduct research, build prototype implementations, and publish and present the results at top conferences and journals. You will also be involved in our teaching activities and supervise thesis students as well as student assistants.

What we do

Our mission is to demonstrate that privacy can be efficiently protected in real-world applications. For this, we *bring theory into practice* by using methods from applied cryptography and algorithm engineering for developing protocols, tools, and software prototypes to efficiently protect sensitive data in various applications.

Details: encrypto.de/topics

Why ENCRYPTO

We provide an *open and international working environment* for excellent research in a *sociable team* and give the opportunity for further qualification (doctoral/PhD degree). TU Darmstadt is a *top research university* for [IT security and cryptography in Europe](#) and [computer science in Germany](#).

The position is based in the "City of Science" Darmstadt, which is very international and livable, and well-connected in the Rhine-Main area around Frankfurt. Knowledge of German is beneficial but not required, and TU Darmstadt offers a [Welcome Center](#) and corresponding language courses.

Your profile

- Completed Master's degree (or equivalent) at a top university with excellent grades in IT security, computer science, or a similar field.
- Extensive knowledge in applied cryptography/IT security and very good software development skills are required.
- Additional knowledge in cryptographic protocols (ideally secure multi-party computation) is a plus.
- Experience in hardware synthesis/compiler construction is beneficial.
- You are self-motivated, reliable, creative, can work independently, and want to do excellent research on challenging scientific problems with practical relevance.
- Our working language is English, so you must be able to discuss/write/present scientific results in English. German is beneficial but not required for this position.

Apply now!

Application deadline: **Aug 10, 2022 (Extended)**

Applications will be accepted until the position has been filled.

Start date: As soon as possible

Your application must consist of a **single PDF** including

- a letter of motivation (why are you interested and qualify for this position?),
- a current curriculum vitae,
- certificates (M.Sc., B.Sc., high-school diploma) with detailed transcripts of records and grades, and
- two letters of recommendation (or two references).

Please send your **complete** application to Prof. Thomas Schneider (application@encrypto.cs.tu-darmstadt.de). If you have any further questions, please do not hesitate to contact him.

TU Darmstadt intends to increase the number of female employees and encourages female candidates to apply. In case of equal qualifications applicants with a degree of disability of at least 50% or equal will be given preference. Wages and salaries are according to the collective agreements on salary scales (100% E13 TV-TU Darmstadt).



This document:
[encrypto.de/
2022-CROSSING](https://encrypto.de/2022-CROSSING)



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