



NTNU

Norwegian University of
Science and Technology

Jobbnorge ID: 221390
Deadline: 3/20/2022
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Temporary

The Department of The Department of Information Security and Communication Technology (IIK) has a vacancy for a

Postdoctoral Fellow in Fully Homomorphic Encryption

This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 42,000 students work to create knowledge for a better world.

You can find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

About the position

We have a vacancy for a Postdoctoral Fellow in Fully Homomorphic Encryption (FHE) at IIK. The first year of the position is funded by Intel and we will work in collaboration with our partners there, our main point of contact being Flavio Bergamaschi. The project leader on the NTNU side is Dr. Anamaria Costache. The project, Soteria, has two main deliverable goals. The first one is cryptanalysis of existing schemes, and the second one is developing a framework to assess the threat model while deploying a HE solution.

The postdoctoral fellowship position is a temporary position where the main goal is to qualify for work in senior academic positions.

You will report to the Head of Department.

Duties of the position

- Conduct research activities, in collaboration with the intel partners
- Present the work at relevant venues

Required selection criteria

- You must have completed a Norwegian doctoral degree or corresponding foreign doctoral degree recognized as equivalent to a Norwegian PhD
- You must have a professionally relevant background in cryptography, ideally lattice-based cryptography and/ or Fully Homomorphic Encryption
- Demonstrate a track record of publishing at relevant cryptography venues

The appointment is to be made in accordance with the regulations in force concerning State Employees and Civil Servants and [national guidelines for appointment as PhD, post doctor and research assistant](#)

Preferred selection criteria

- Experience researching Fully Homomorphic Encryption
- Publication record at relevant cryptography venues
- Excellent written and oral English
- Understanding of a Scandinavian language is a benefit

We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and inclusive work environment with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)

- [employee benefits](#)

Salary and conditions

As a Postdoctoral Fellow (code 1352) you are normally paid from gross NOK 545 300 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 3 years.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

The position is subject to external funding.

It is a prerequisite you can be present at and accessible to the institution on a daily basis.

About the application

The application and supporting documentation to be used as the basis for the assessment must be in English (ta stilling til dette)

Publications and other scientific work must follow the application. Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognizing that the quantity of your research may be reduced as a result.

The application must include:

- CV, certificates and diplomas
- transcripts and diplomas for bachelor's-, master's- and PhD degrees.
- Academic works - published or unpublished - that you would like to be considered in the assessment (up to 5 items)
- Research plan
- Name and address of three referees

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

General information

[Working at NTNU](#)

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

According to the Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact **Anamaria Costache**, email anamaria.costache@ntnu.no. If you have any questions about the recruitment process, please contact **Katrine Rennan**, katrine.rennan@ntnu.no.

Please submit your application electronically via jobbno.no with your CV, diplomas and certificates. Applications submitted elsewhere will not be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from [China Credentials Verification \(CHSI\)](#).

If you are invited for interview you must include certified copies of transcripts and reference letters. Please refer to the application number 2022/9235 when applying.

Application deadline: 20.03.2022

NTNU

NTNU - knowledge for a better world

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Department of Information Security and Communication Technology

Research is vital to the security of our society. We teach and conduct research in cyber security, information security, communications networks and networked services. Our areas of expertise include biometrics, cyber defence, cryptography, digital forensics, security in e-health and welfare technology, intelligent transportation systems and malware. The Department of Information Security and Communication Technology is one of seven departments in the [Faculty of Information Technology and Electrical Engineering](#) .

Additional information

Place of service:

NTNU Campus Trondheim 7491 Trondheim (Trondheim Municipality)