

The University of Stavanger (UiS) has about 12,000 students and 1,700 employees. We are the only Norwegian member of the European Consortium of Innovative Universities. The university has high ambitions. We will have an innovative and international profile, and will be a driving force in knowledge development and in the process of societal change. Together with our staff and students, we will challenge the well-known and explore the unknown.

Department of Electrical Engineering and Computer Science is part of the Faculty of Science and Technology. The department carries out research within data, electricity and electronics, and offers bachelor programs in electrical- and computer engineering, master programs in computer science and cybernetics/signal processing, and a PhD program in information technology. The master program in computer science is an international program and is taught in english. There are currently 40 employees, including research fellows and postdocs, and 520 students at the department.

Postdoctoral Fellow

University of Stavanger invites applications for a 2-year position as a Postdoctoral Fellow in computer science to work on blockchains and smart contracts at the Department of Electrical Engineering and Computer Science. The position is vacant by appointment.

The position is associated with the research project BBChain: Efficient Trustworthy Computing with Blockchains and Biometrics. The goal of this project is to research and develop a long-term and highly available document storage system based on Byzantine consensus and on a blockchain like data structure. Application domains for such a system, includes electronic health journals and business contracts.

The postdoctoral fellow recruited for this project is expected to participate in fundamental research related to blockchain technologies and to participate in the supervision of PhD and master students. The research work includes designing and evaluating protocols, algorithms, and mechanisms for applications where strong data integrity is required. For instance, to demonstrate a system with the ability to verify the authenticity of a document with biometrics and prevent unauthorized alterations without consent from the involved principals, as specified in a smart contract. Other possible research directions include scalable Byzantine consensus algorithms and secure enclave technologies (e.g., Intel SGX) for biometric-based blockchains. The project is open to a fair amount of freedom to explore alternative directions within the space of blockchains and smart contracts.

The BBChain project is funded by the Research Council of Norway and is a joint research project between UiT The Arctic University of Norway and University of Stavanger, with external partners from University of Oslo, University of Trento, Italy, and the Biometric System Lab at the University of Bologna, Italy. The Faculty of Science and Technology at the University of Stavanger funds two PhD students on this project as a strategic investment into blockchain research. The blockchain research group at the University of Stavanger is growing and we frequently collaborate with other institutions in Norway and internationally, including Berkeley Lab, University of California, University of Maryland, Cornell University, Sapienza University of Rome.

What we offer is the following:

- A strong collaborative research environment. Our students have won best paper awards and our alumni are employed by Schibsted, Microsoft, Altibox, Lyse Smart, ABB Robotics and also in academia.
- Opportunities for research stays with our renowned collaborators worldwide.
- Well-paid Postdoc position, in a country that has been ranked by the UN as having the highest standard of living in the world.
- A newly renovated attractive looking work place.

The objective of the position is to strengthen the research career of a scholar in computer science or a related field, and to give that scholar the opportunity for further qualification towards an academic career. Candidates must hold a PhD and are expected to have an excellent academic record and experience in distributed systems, formal methods, system security or cryptography, with a strong interest in blockchain technologies. An educational background covering subjects such as biometrics and game theory will be considered valuable. In addition to research experience, the candidate should be an excellent developer and be able to conduct large scale experiments in realistic environments. Industry experience as a developer will be a plus.

Qualifications related to creativity, innovation and commercialization of research will also be given emphasis in appointments to academic positions at the university.

The applicant must submit a description of a research project and a plan for its completion. It must be clear from the application in what way the project will add to the applicant's competence.

The applications will be assessed in relation to the relevance, quality and feasibility of the project. In addition to an evaluation of their submitted project plan and scientific work, potential candidates will be invited for an interview.

The research project will be carried out at the University of Stavanger. It is assumed that the appointee will work full time on the project and that she/he will participate in the scholarly circles at the faculty and university.

The position salary is set according to the State Salary Code, l.pl 17.510, code 1352, of NOK 515.200 per annum. In special cases, higher salaries may be considered. The position provides an automatic membership in the Norwegian Public Service Pension Fund, which guarantees favorable retirement benefits.

Further information about the position can be obtained from professor Hein Meling, email hein.meling@uis.no. Contact professor Meling by email if you want to make arrangements for a voice/video call prior to applying. Information about appointment procedures can be obtained from HR-advisor Janne Halseth, email janne.halseth@uis.no.

The University is committed to a policy of equal opportunity in its employment practices. The University currently employs few female postdoctoral researchers within the academic field in question, and women are therefore particularly encouraged to apply.

Please, register your application in an electronic form at jobbnorge.no. Relevant education and experience must be included. Project description and plan, certificates/diplomas, references, a list of publications together with up to 15 publication documents, and other documentation that you may consider relevant, should be submitted as attachments to the application as separate files. The documentation must be available either in a Scandinavian language or in English. If the attachments exceed 30 MB altogether, they will have to be compressed before upload.

Jobbnorge ID: 158208, Deadline: Closed