The University of Stavanger (UiS) has about 10,700 students and 1,560 employees. The University is located in the third largest urban region in Norway, with a dynamic labor market and exciting cultural and leisure activities. We are the only Norwegian member of the European Consortium of Innovative Universities. The university has high ambitions. We will be a driving force in the development of knowledge in the region, and an international research university with an emphasis on innovation. 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 departement.

Research fellow in Computer Science

The University of Stavanger invites applications for a doctorate scholarship in the area of *blockchains and smart contracts* at Faculty of Science and Technology.

This is a trainee position that will mainly give promising researchers an opportunity for professional development leading to a doctoral degree.

The research fellow will be appointed for three years with resarch duties. The position is vacant from January 1. 2018 or by appointment.

The project is titled *Blockchains as Infrastructure for Strong Data Integrity*, and revolves around the challenge of verifying document authenticity and ensuring their permanent availability. This is a general problem that applies to numerous application domains, including health journals and business contracts. The PhD student recruited for this project will conduct fundamental research into blockchain technologies aimed at designing and evaluating protocols, algorithms, and mechanisms for applications where it is critical that strong data integrity be maintained. This could for example be the ability to *verify the authenticity of a document with biometrics*, and to *ensure that the document cannot be deleted* without consent from the involved parties, e.g. as specified through a smart contract. The project is open to a fair amount of freedom to explore alternative directions within the space of blockchains and smart contracts.

The position is funded by Faculty of Science and Technology as part of a strategic investment into blockchain research at the faculty.
Applicants must have a strong academic background with a five-year master degree within computer science/engineering or mathematics, preferably recently, or possess corresponding qualifications which could provide a basis for successfully completing a doctorate. Both the grade for the master's thesis and the weighted average grade of the master's degree must individually be equivalent to or better than a B grade.

A successful applicant should have a strong background in at least some of the following scientific fields: fault tolerant distributed systems, formal methods, networking, system security, biometrics, cryptography, game theory, and discrete mathematics.

When ranking applicants, emphasis will be place on each applicant's potential to conduct research in the field of the position, as well as that applicant's individual prerequisites for research education. The appointee must be able to work independently and as a member of a team, be creative and innovative. The research fellow must have a good command of both oral and written English.

The doctorate research will mainly be carried out at the University of Stavanger. A period of study abroad at a recognized and relevant center of research is encouraged and financially supported by the University.

Upon graduating with a doctorate, the research fellow will be able to seek employment at various academic and research institutions across the world as well as in the technology industry.

The research fellow will receive salary according to the Norwegian State Salary Code, l.pl 17.515, code 1017, LR 20, ltr. 50, currently NOK 436,900 per year. The position provides for automatic membership in the Norwegian Public Service Pension Fund, which guarantees favorable retirement benefits. Members may also apply for home investment loans at favorable interest rates.

Project description and 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 the appointment procedures can be obtained from HR consultant Anne Karin Rafos, telephone +47 51831711, email anne.k.rafos@uis.no

The University is committed to a policy of equal opportunity in its employment practices. The University currently employs few female research fellows within computer science and women are therefore particularly encouraged to apply.

Please register your application in an electronic form on jobbnorge.no. Relevant education and experience must be registered on the form. Certificates/diplomas, references, list of publications and other documentation that you consider relevant, should be submitted as attachments to the application as separate files. If the attachments exceed 30 MB altogether, they will have to be compressed before uploading.

Jobbnorge ID: 143968, Deadline: Closed