

Jobbno ID: 259190
Deadline: 4/15/2024
Website: <http://www.uia.no>
Scope: Fulltime
Duration: Temporary

PhD Research Follow in ICT - Convergence of Artificial Intelligence and Blockchain Technology

Creating knowledge together

When people who are committed come together to further knowledge, anything is possible.

The University of Agder combines the unique warmth and charm of Southern Norway with first-class scientific, technological and artistic expertise.

Would you like to work with us to create better solutions to our shared challenges?

Video: <https://vimeo.com/782451416/773266e83a>

About the position

The University of Agder invites applications for a full-time fixed-term appointment as PhD candidate in Technology/Information and Communication Technology for a period of three years. The position is currently located in Grimstad, Norway. The starting date is as soon as possible or to be negotiated with the Faculty.

[The department of Information and communication technology](#) has three large and active research groups in Information and Communication Technology including eight Professors, 20 Associate Professors/Assistant professors and about 20 Research Fellows on the PhD programme in ICT. The Department of ICT pursues a variety of research interests, focusing especially on ICT and crisis management, artificial intelligence, cybersecurity, eLearning, and eHealth. The department has successfully led a number of large research projects funded by the Research Council of Norway, the EU research programmes FP7 and H2020 as well as national and international industries.

Research topics

The convergence of AI and blockchain technologies holds immense potential to transform various industries. Some key ways in which they can synergize include (1) enhancing AI security for by providing immutable and thus trustworthy AI models and detection of anomalies and thus fraud prevention, (2) boosting AI transparency by providing complete audit trails for AI decision-making to enhance trust in AI models for critical applications such as finance or healthcare, and (3) developing scalable and efficient AI thru secure data sharing on a blockchain. This convergence of AI and blockchain technologies hold the promise for advanced applications such as revolutionizing supply chain management with tamper-proof records and AI-driven optimization, personalization of healthcare, and provide self-regulating marketplaces where AI algorithms handle transactions autonomously within the secure framework of blockchains. Ethical considerations and the development of regulatory frameworks are imperative for responsible AI development on blockchains.

The ideal candidate will have

- an understanding and working knowledge of foundational AI concepts such as machine learning, deep learning, and natural language processing. Familiarity with specific AI frameworks and tools will be beneficial
- a deep understanding of blockchain technology, including consensus mechanisms, cryptography, smart contracts, and different blockchain platforms
- an understanding cybersecurity principles and practices to ensure secure integration of AI and blockchain systems
- strong programming skills in languages like Python, Java, or smart contract languages

Required qualifications

Applications from applicants who already hold a PhD will normally not be considered.

- The candidate must hold a master's degree in ICT, Computer Science or a similar/related field and document competence in areas relevant to the position.
- Strong academic credentials
- Written and spoken English proficiency. International candidates that are not exempt from the English language requirements pursuant to the guidelines of the Norwegian Agency for Quality Assurance in Education (NOKUT) must document this through one of the following tests with the stated results or better:
 - TOEFL - Test of English as a Foreign Language with a minimum score of 600 for the Paperbased Test (PBT), or 92 for the Internet-based Test (iBT)
 - IELTS - International English Language Testing System, with the result of 6.5

Applicants will be assessed on the basis of academic background and results, attainment, and any previous research and development work.

A prerequisite for employment is that the candidate is to be admitted to UiA's [PhD programme at the Faculty of Engineering and Science, Specialisation in Engineering Sciences](#).

Further provisions relating to the positions as PhD Research Fellows can be found in the [Regulations Concerning Terms and Conditions of Employment for the post of PostDoctoral Research Fellow, Research Fellow, Research Assistant and Resident](#).

Personal qualities

- Personal suitability,
- Good Communication and teamwork skills, inventiveness, and a proactive approach, will be emphasized in the evaluation as well as relevant practical experience.
- The PhD Research Fellow will be expected to contribute to an active research community that promotes the personal and professional growth of the doctoral candidate. The position places great demands on the applicant's capacity for independent goal-oriented work, ability to concentrate and attention to detail.

We offer

- Professional development in a large, exciting and socially influential organisation
- A positive, inclusive and diverse working environment
- Modern facilities and a comprehensive set of welfare offers
- Membership of the [Norwegian Public Service Pension Fund](#)

[More about working at UiA.](#)

The position is remunerated according to the State Salary Scale, salary plan 17.515, code 1017 PhD Research Fellow, NOK 532 200 gross salary per year. A compulsory pension contribution to the Norwegian Public Service Pension Fund is deducted from the pay according to current statutory provisions.

General information

UiA is an open and inclusive university. We believe that diversity enriches the workplace and makes us better. We, therefore, encourage qualified candidates to apply for the position independent of gender, age, cultural background, disability or an incomplete CV.

Women are strongly encouraged to apply for the position.

The successful applicant will have rights and obligations in accordance with the current regulations for the position, and organisational changes and changes in the duties and responsibilities of the position must be expected. The engagement is to be made in accordance with the regulations in force concerning the acts relating to [Control of the Export of Strategic Goods, Services and Technology](#). Appointment is made by the University of Agder's Appointments Committee for Teaching and Research Positions.

Short-listed applicants will be invited for interview. With the applicant's permission, UiA will also conduct a reference check before appointment. [Read more about the employment process.](#)

In accordance with the Freedom of Information Act § 25 (2), applicants may request that they are not identified in the open list of applicants. The University, however, reserves the right to publish the names of applicants. Applicants will be advised of the University's intention to exercise this right.

Application

Submit your application and CV online. Please click on the link "**Apply for this job**". The following documentation should be submitted as attachments to the online application:

- Certificates and/or grades for all post-secondary education, up to and including the bachelor's level
- Master's degree/higher degree certificate, with a summary of the courses/subjects included in the degree
- Applicants with a foreign higher education must attach an official description of the grading system used at the issuing institution Summary (approximately 1-2 pages) of the master's thesis
- Applicants who are required to document their English proficiency must submit their TOEFL or IELTS test results (these may be forwarded after the closing date)
- Summary or links to the applicant's scientific publications (if any)
- A description of the candidate's research interests and background for the project applied for

The applicant is fully responsible for submitting complete documentation within the deadline. Without complete documentation we cannot, unfortunately, include you in the assessment process.

All documentation of education must be in the original language and in English, and the translation should preferably be from the issuing university. Additional documentation must be in English.

Closing date: 15.04.24.

Contact

For further information about the position please contact:

- Head of Department Folke Haugland, tel.: +47 37 23 31 12, e-mail: folke.haugland@uia.no.
- Professor Turgay Celik, tel. +47 417 88 312, e-mail: turgay.celik@uia.no.

- Professor Vladimir Oleshchuk. tel. +47 412 09 000, e-mail: vladimir.oleshchuk@uia.no.
- Professor Christian W. Omlin, tel. +47 432 59 144, e-mail: christian.omlin@uia.no.

For questions about the application process, please contact:

- HR Advisor Linda H. Kristiansen, tel. +47 48 14 06 09, e-mail linda.h.kristiansen@uia.no

University of Agder

The University of Agder has more than 1500 employees and almost 14 000 students, making us one of Southern Norway's largest workplaces. Our dedicated staff engage in research, teaching and dissemination across a diverse range of fields.

The university is located on two modern campuses in Kristiansand and Grimstad.

Additional information

Place of service:

Jon Lilletunsvei 9 4879 Grimstad (Grimstad Municipality)