

Assistant Professor in Blockchain-related Computer Science

Faculty of Electrical Engineering, Mathematics and
Computer Science

Delft University of Technology, the Netherlands



See also: <https://www.tudelft.nl/over-tu-delft/werken-bij-tu-delft/vacatures/>

Challenge	<i>Designing and analyzing secure and robust blockchain-based systems and mechanisms</i>
Change	<i>Digitizing society and the economy</i>
Impact	<i>Trust in the internet</i>

Job description

You will be expected to significantly strengthen the research portfolio in blockchain technology of the Delft Blockchain Lab, to collaborate with other academic partners and industry, to acquire external research funding, to (co-)manage externally funded research projects, and to transfer knowledge to external parties. In this position, the research calls for contributions to the design, deployment and analysis of complete blockchain-based software stacks for trust in the internet, or for research into the fundamental mechanisms that support such designs. For this position, there is no restriction at all with respect to the subfield of Computer Science in which you perform blockchain-oriented research, and you will become a member of the research group that is most appropriate for you. In addition, you will teach at the undergraduate and graduate levels, and supervise MSc and PhD students.

The Delft Blockchain Lab

The Delft Blockchain Lab (DBL, <https://www.tudelft.nl/delft-blockchain-lab/>) of Delft University of Technology, under the leadership of Prof. Dick Epema and Dr. Johan Pouwelse, brings together all blockchain-related research at the TU Delft, and takes a holistic approach to developing scalable, robust, reliable, privacy-sensitive and secure blockchain systems. DBL is largely based in the two Computer-Science Departments Intelligent Systems (in particular Cybersecurity) and Software Technology (in particular Distributed Systems and Software Engineering) in the Faculty of Electrical Engineering, Mathematics and Computer Science. It also performs research into ethical and science communication aspects of blockchain and into applications of blockchain such as intelligent electrical power grids. DBL has produced several world-first innovations such as a fully scalable blockchain architecture and a decentralized blockchain-regulated market, and has grown into one of the larger blockchain labs in Europe.

The Departments Intelligent Systems and Software Technology

The Departments of Intelligent Systems (INSY) and Software Technology (ST) together constitute one of the leading Dutch departments in research and academic education in computer science, employing over 300 people. Together, they are responsible for the curriculum of the Bachelor's and Master's programmes in Computer Science as well as the Master's programme in Embedded Systems. The inspiration for its research topics is largely derived from technical ICT problems in industry and society related to cybersecurity, computer graphics, artificial intelligence, machine learning, multimedia retrieval, large-scale distributed processing, embedded systems, algorithmics, programming languages, software engineering, and web-based information systems.

Job requirements

- A PhD in any blockchain-related subfield of Computer Science.
- A strong background in system aspects of blockchain such as scalability, efficiency, trust, and attack resilience, or in fundamental aspects of blockchain such as cryptography for formal security proofs and privacy-preserving authentication, consensus mechanisms, and smart contract validation.
- A proven record of research excellence as demonstrated by publications in reputable conferences or journals.
- Good verbal and written communication skills in English.
- A motivated, results-driven team player mentality.

For more experienced candidates, an associate professor position may also be possible.

Conditions of employment

A tenure-track position is offered for six years. In the fifth year we'll decide if you will be offered a permanent faculty position, based on performance indicators agreed upon at the start of the appointment. We expect that you have the potential to grow towards an Associate Professor and/or Full Professor role in the future.

Inspiring, excellent education is our central aim. We expect you to obtain a University Teaching Qualification (UTQ) within three years if you have less than five years of teaching experience. This is provided by the TU Delft UTQ programme.

TU Delft sets high standards for the English competency of the teaching staff. The TU Delft offers training to improve English competency. If you do not speak Dutch, we offer courses to learn the Dutch language within three years.

Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities; the monthly salary for this position is between €3746 and €5127. The TU Delft offers a customisable compensation package, a discount on health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged.

For international applicants we offer the Coming to Delft Service and Partner Career Advice to assist you with your relocation. An International Children's Centre offers childcare and there is an international primary school.

Information and application procedure

For more information about this position, please contact Prof. D.H.J. Epema, e-mail: D.H.J.Epema@tudelft.nl. To apply, please e-mail an application letter, a detailed curriculum vitae including a publication list, research and teaching statements, and the names of three references by August 31, 2021 to mrs. C.A. Reijenga, vacancies-eemcs@tudelft.nl. When applying for this position, please refer to vacancy number TUD00340.