Delft University of Technology invites applicants for 2-year postdoc and research engineer positions in blockchain technology in the Blockchain Lab (www.blockchain-lab.org) of the Distributed Systems Group in the Department Software Technology of the Faculty of Electrical Engineering, Mathematics and Computer Science. These positions are funded by the Executive Board of the university as a strategic investment in the Delft Blockchain Technology (DBT) initiative.

The Distributed Systems Group
The Distributed Systems group (http://www.ds.ewi.tudelft.nl), under the leadership of Prof. Dick Epema, performs world-class research in the design, implementation, deployment, and analysis of large-scale, Internet-based computer systems. It currently has three research lines: cooperative systems (e.g., blockchain technology, trust and reputation systems), big-data processing, and scheduling in distributed computing systems. The research on blockchain technology strongly builds on more than a decade of research in peer-to-peer systems, and is led by Dr. Johan Pouwelse. The research of the group has a strong experimental flavor, validating the proposed new concepts by means of implementation and deployment in prototypes that are used in the real world. The Distributed Systems group currently has blockchain projects within the financial and logistics sectors, and it has grown into one of the largest blockchain labs in Europe. The lab has produced several world-first innovations such as a fully scalable blockchain architecture and a decentralized blockchain-regulated market, and it has replaced proof-of-work with trust.

The Department Software Technology
The Department of Software Technology (ST) is one of the leading Dutch departments in research and academic education in computer science, employing over 150 people. The department ST is responsible for a large part of 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 large-scale distributed processing, embedded systems, programming productivity, and web-based information analysis.

The Faculty Electrical Engineering, Mathematics and Computer Science
The Faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS) is known worldwide for its high academic quality and the social relevance of its research programmes. Offering an international environment, the faculty has more than 1100 employees (including about 400 PhD students) and more than 2100 bachelor’s and master’s students. Together they work on a broad range of technical innovations in the fields of electrical sustainable energy, microelectronics, intelligent systems, software technology, and applied mathematics.
Job description
The Distributed Systems group is looking for talented and ambitious blockchain enthusiasts. Their responsibilities include:
• (postdocs) Conducting research in blockchain technology, in particular addressing the complexity and inefficiency of the core blockchain mechanisms for validation and immutability of transactions, and investigating new mechanisms for the blockchain;
• (research engineers) Developing and engineering new software blockchain solutions and experimenting with these solutions;
• (both) Co-supervising MSc students and collaborating with external project partners.

Requirements
Applicants for a postdoc position must have a PhD degree in distributed algorithms or distributed systems, and a proven track record of research excellence. Applicants for a research engineer position must have an MSc degree in distributed algorithms or distributed systems, with proven programming skills. For both positions, applicants must have the ambition to strengthen and expand the research in blockchain technology of the Distributed Systems group, a team player mentality, and good communication and social skills.

Conditions of employment
Both the postdoc and the research engineer positions are for a period of two years. TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. An International Children’s Centre offers childcare and an international primary school. Dual Career Services offers support to accompanying partners. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities. The gross salary per month for the postdoc positions is € 3.358 to € 4.757, and for the research engineer positions it is € 2.588 to € 4.084.

Information and application
For more information about the offered positions, please contact Prof. D.H.J. Epema, phone: +31 (0)15-2783853, e-mail: D.H.J.Epema@tudelft.nl, or Dr. J.A. Pouwelse, phone: +31 (0)15-2782539, e-mail: J.A.Pouwelse@tudelft.nl. To apply, please e-mail an application letter, a detailed curriculum vitae (for postdoc applications, including a publication list), and the names of three references by 16 June 2017 to drs P.T.M. van den Bergh, Hr-eemcs@tudelft.nl. When applying for this position, please refer to vacancy number EWI2017-15.