Faculty of Civil Engineering

The Institute of Construction Informatics offers two positions, subject to resources being available, starting **February 1st, 2019** as

**Research Associate**

(Subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

The period of employment is limited to fifteen months with the option of prolongation (subject to excellent performance). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The positions offer the chance to obtain further academic qualification.

At our Institute, an interdisciplinary team of researchers from various disciplines (civil engineering, architecture, physics, and computer science) works on the development of novel modelling methods for information management in the AEC industry. The emphasis is on complex model transformations between different model layers and views, such as product, process, simulation, performance or cost models. The Institute has established a track record in using reference patterns, ontologies, or multi-model methods.

**Tasks:** The positions are embedded in research and development activities in the area of flexible, integrated systems for planning, design and operation of buildings using cyber-physical systems (industry 4.0) and big data technologies.

**Position 1:** Development of ontology-based methods for data sharing of building data supporting the energy-efficient renovation of buildings. The emphasis is on the development of Linked-Data Models.

**Position 2:** Development of „Performance Evaluation Systems“ for buildings based on BIM, building automation systems and big data.

**Requirements:** Applicants should hold a university degree (Master, Dipl.-Ing. or equivalent) obtained from an internationally recognized university in either engineering, architecture or computer science. Knowledge and skills in at least one of the following areas are required: (i) Ontologies, (ii) Big Data, (iii) Data Analysis. A demonstrated commitment to work in international, interdisciplinary teams and excellent command of the English and German languages in speaking and writing to prepare research papers are essential. Willingness to travel and mobility are required. Knowledge in building information modelling is desirable.

The position is open to university graduates and engineering professionals. Applications from women are particularly welcome. The same applies to people with disabilities.

Please submit your comprehensive application including the usual documents and a copy of your Master Thesis (or equivalent) by **January 29th, 2019** (stamped arrival date of the university central mail service applies) by mail to: **TU Dresden, Fakultät Bauingenieurwesen, Institut für Bauinformatik, Herrn Prof. Dr.-Ing. K. Menzel, Helmholtzstr. 10, 01069 Dresden, Germany** or via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document to: **bauinformatik@mailbox.tu-dresden.de.** Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: [https://tu-dresden.de/karriere/datenschutzhinweis](https://tu-dresden.de/karriere/datenschutzhinweis)