Ph.D. scholarship in BIM-GIS integration

The TUM Center of Digital Methods for the Built Environment (Leonhard Obermeyer Center, LOC) is offering a Ph.D. scholarship for research in the field of BIM-GIS integration with a total duration of three years. The scholarship is €2,000 per month and is not subject to income tax.

LOC’s inter-disciplinary team is performing research in the broad field of computational methods for the built environment. Particular emphasis is placed on semantic 3D city models, building information modeling, point cloud capturing and processing, as well as numerical simulations of physical phenomena on diverse scales.

In the frame of the announced Ph.D. scholarship, a deep integration of BIM and GIS data and technologies is supposed to be investigated. In this regards, the focus is on the design, construction, and operation of built infrastructure (roads and railways). In recent years, the model development in this field has been driven forward in both the GIS and BIM domain; however, mostly isolated from one another, resulting in divergences and rendering overarching analyses difficult to perform. Accordingly, the scholarship holder is expected to systematically analyze the semantic structure and granularity of the data models CityGML, InfraGML and IFC-Infra, to critically investigate the suitability of Linked-Data approaches and to develop and experiment new approaches of semantic alignment. The interaction with international research projects will form part of these endeavors.

For applying for this scholarship, the candidate should possess in-depth skills and experiences in object-oriented programming. A background in Construction Informatics or Geoinformatics is beneficial. Excellent communication skills in English and the willingness to learn the German language are essential.

If you hold a diploma or Master’s degree in Civil engineering, Geodesy or Computer science, possess a sound knowledge of applied informatics and want to join a highly motivated research group, please submit your application including all relevant information (curriculum vitae, copies of testimonials, etc.) to the email address provided below. The advertisement closes on March 15th, 2019.

Granting equal opportunities is part of our personnel policy. TUM encourages applications from qualified female candidates. Handicapped applicants will be given preference in the case of equal qualifications.

Prof. Dr.-Ing. André Borrmann
Leonhard Obermeyer Center
Technische Universität München
Arcisstrasse 21
80333 München

loc@tum.de

www.loc.tum.de