PhD Position in Smart Cities

The Urban Planning Group in Eindhoven University of Technology (TU/e) is seeking a PhD candidate supported by a new EU project, DESENT, about urban energy and transportation under the framework of smart cities.

Position:	PhD-student
Departments:	Department of the Built Environment
FTE:	1,0
Date off:	13/02/2016
Reference number:	V38.2465

Job description
The success of smart city development needs integrated solutions about energy, transport, service and governance with the full involvement of multiple stakeholders, governments, enterprises, citizens, etc. DESENT is such a project focusing on providing a smart decision support tool for urban energy and transport by developing innovative approaches and utilizing cutting-edge technologies using co-creation. The consortium, which integrates top universities, research institutes, enterprises and private companies, will tackle the various challenges by developing/implementing the innovative solutions in demo cities. DESENT will support smart decision making for policy makers and personalized services for citizens.

Working together with partners in other European countries, we are specifically responsible for:

- Developing and extending a micro-simulation model which predicts the sequence of activities and trips by including the impacts of supplier scenarios, e.g. new technologies. The model will produce a consistent and integrative account of time use of individuals for activities and trips, which serves as the basis for predicting energy consumption in buildings and for transport.

- Develop a traffic simulation model to predict the spatial distribution of vehicles on a specific road segment of the city networks by time of day. A realistic energy prediction model, for a specific types of vehicle (electric vehicles and conventional vehicles), will be developed considering the effect of traffic congestion and trip trajectories

Job requirements
Qualification:
- Holds a master degree in a relevant field, preferably in transportation or urban planning
- Knowledge in transport demand modeling and/or travel behaviour analysis
- Creative and enthusiastic
- Interested in developing advanced models
- Sufficiency in English
- Advanced programming skills
- Good knowledge of statistics and mathematics

Conditions of employment
A three-year Ph.D position is supported. The project will start soon in early 2016 and end in 2019.

The salary starts at € 2,174 gross per month in the first year increasing to € 2,651- gross per month in the third year. In addition, PhD candidates receive 8% holiday allowance and 8.3% end of the year allowance. Besides this, the TU/e has an excellent package of attractive benefits for employees, a child-care facility, and a modern sports complex. Assistance for finding accommodation can be given. Especially for PhD students the TU/e also offers opportunities for personal development. We do this by offering every PhD student a series of courses that are part of the Proof program as an excellent addition to your scientific education.

Information and application
More information can be obtained by contacting:

Prof. dr. H.J.P. Timmermans: H.J.P.Timmermans@tue.nl

Further information: Tao Feng (t.feng@tue.nl), Dujuan Yang (d.yang@tue.nl)

Please submit your application (motivation letter, recent CV) to our website www.tue.nl (max. 5 x 2 MB) using the 'APPLY NOW' or 'SOLLICITEER DIRECT' button on the TU/e website. Do not send us your application by email.

Apply now on-line