Temporary Full-time Position in Singapore

Visualizations in CFD

Future Cities Laboratory, Singapore-ETH Centre, ETH Zurich

21. April 2014

The Singapore-ETH Centre for Global Environmental Sustainability (SEC), a joint effort between ETH Zurich and the Singapore National Research Foundation (NRF), launched the Future Cities Laboratory (FCL) as its first research program in Singapore in September 2010. By now the FCL team counts over 180 team members from all over the world. They undertake cutting-edge research in disciplines ranging from material science, engineering and environmental technologies to communications technology and architecture. The FCL researches and develops solutions and guidelines directed towards the sustainable development of buildings, districts and regions.

The FCL Research Module IX “Simulation Platform” aims at advancing digital technologies in urban design, modeling and simulation. In this context the FCL offers a

Full-time Position (Ref: 11529)
Visualizations of Sankey diagrams

Your Tasks: Visualization of the Sankey diagram for energy flows as an interactive tool. The Sankey diagram of energy flows in Switzerland and Singapore has been very successful in communicating the complex relationship of energy production and demand as well in addressing policy making opportunities. Now we would like to explore the feasibility of making the diagram interactive, as it has been done for many other projects (e.g. the Ethiopia Energy tool, the Projections of Reality). Tasks:

• Study the current Sankey diagrams for Singapore and Switzerland

• Implement an interactive version of the basic diagram

• Provide design alternatives for the multi-touch screens

• Develop a data I/O for scenario development

• Expand the visualization on other countries

Your Profile: You are interested in working in an exiting and large research project in Singapore and you have the ability to perform research and teamwork with a short period of vocational adjustment. You are a highly motivated candidate with initiative and you enjoy working in an interdisciplinary and multinational team. A Bachelor’s or Master’s degree in Computer Science or Computer Engineering, and experience in design or visualizations are conditions. Good English and strong collaborative skills are a plus.

You will work on the newly built CREATE Campus of the National Research Foundation of the Republic of Singapore. The position will be available from July/ August 2014. The appointment is limited to 6 month. For further information about the position, please contact Dr. Matthias Berger by E-mail mberger@arch.ethz.ch and visit our website (http://www.futurecities.ethz.ch/research-modules/simulation-platform/).

Applications as pdf file with cover letter, CV, and diplomas should be sent online (mberger@arch.ethz.ch) to the attention of: Dr. Matthias Berger, Singapore-ETH Centre, 1 CREATE Way, #06-01 CREATE Tower, Singapore 138602