

Full Time: Senior Research Fellow (SRF) / Research Fellow (RF) / Research Associate (RA) for Large-scale Modelling and Simulation of Transportation Systems

Availability: From Nov 2016 and onwards
Contact: Prof Wentong CAI (aswtcai@ntu.edu.sg)
Location: NTU / TUM CREATE, Singapore

Background

We have open positions for research fellow and research associate with a background in Computer Science, Agent Based Modelling and Simulation and Complex Systems

Objective & tasks

TUM CREATE is researching into the Ultimate Public Transport System (UPTS) for Singapore. Performing the next-generation design analysis for urban transport systems will require technologies that allow the collaboration from different fields of expertise and the inter-linking of different highly detailed computational models in a consistent manner. Another key factor is to increase the responsiveness and speed of simulation-based analysis. The candidates selected for this job will be mainly working on the development of advanced HPC-based techniques for simulation-based design and analysis and are required to work closely with researchers working in other areas under the TUM CREATE programme.

Min. Years of Experience: 3-5 years for SRF

Degree Level: PhD for SRF & RF / Master for RA

Degree Specialisation: Computer Science

What we offer you

- An international and multidisciplinary working environment
- Opportunity to work on a project with real-life relevance

Soft Skills

- Ability to define scientific studies independently (for SRF & RF position)
- Ability to work in and lead groups consisting of software developers and scientific researchers (for SRF & RF position)
- Team player and goal oriented
- Ability to collaborate with groups consisting of diverse expertise ranging from transportation engineer to energy experts, designs and software engineers.

Technical Requirements

- Strong programming skill
- Knowledge and experience related to distributed systems
- Knowledge and experience related to modelling and simulation of complex systems
- Experience in large-scale software development
- Strong publication record with publications in top tier conferences and journals (for SRF & RF)

Knowledge in traffic simulation is not required. But, candidates with relevant experience will be considered favourably.

Send your resume/CV to the contact person if interested
NOTE: Only shortlisted candidates will be contacted

ABOUT TUM CREATE

TUM CREATE is a research platform for the improvement of Singapore's public transportation, including the deployment of electric and autonomous mobility. At TUM CREATE, researchers from Technical University Munich and Nanyang Technological University join forces and are funded by Singapore's National Research Foundation as part of the Campus for Research Excellence And Technological Enterprise (CREATE) to investigate into next generation transportation systems. TUM CREATE is organised into 6 different research groups with each group bringing world-class expertise in their respective domains to study the different problems in establishing the Ultimate Transportation System of the future in Singapore.

