

Full Time: Research Fellow for Complex Systems analysis of AV Enabled Transportation Systems

Availability: From Sep 2016 and onwards

Contact: Dr. Suraj Nair suraj.nair@tum-create.edu.sg

Location: TUM CREATE, Singapore

Background

We have open position for a research fellow 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. Autonomous mobility and enabling infrastructure will be a key focus. Different aspects of the problem ranging from the transport infrastructure, to the power system, vehicle design and sensor deployment will be studied. The research conducted in this project will focus on studying the different problems associated with this UPTS from a complex systems perspective. The candidate selected for this job will define studies and the necessary models for studying issues that arise due to the inter dependencies between the different layers of this future transport system (for e.g. What would the impact on the power system be of a particular design of the transport system)

Min. Years of Experience: 2-5 years

Degree Level: PhD

Degree Specialisation: Computer Science

What we offer you

- An international and multidisciplinary working environment
- Opportunity to work on a project with real-life relevance and state of the art robotic systems

Soft Skills

- Ability to define scientific studies independently
- Ability to work in and lead groups consisting of software developers and scientific researchers
- Team player and goal oriented

Programming Skills

- C++, Java, Python
- Comfortable with Linux, Git

Technical Requirements

- Knowledge and experience in concepts related to Modelling and Simulation of Complex systems
- Knowledge and experience with Agent Based Modelling and Simulation
- Knowledge and experience in Traffic Simulation.
- Ability to collaborate with groups consisting of diverse expertise ranging from transportation engineer to energy experts, designs and software engineers.
- Strong publication record with publications in top tier conferences and journals.

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.

