

SMART Post-Doc Position Description
11 Jan 2018

PROJECT OVERVIEW

The Singapore-MIT Alliance for Research and Technology (SMART) Centre is looking for an outstanding postdoctoral researcher to participate in a project on space systems.

The researcher will report to the Director of the SMART Centre, Dr. Daniel Hastings. The postdoctoral associate will also be expected to partner with MIT faculty and Singapore organizations interested in space systems.

The project is to analyze possible futures for the unmanned space enterprise in the next thirty years. The project is use modeling methods such as system dynamics and agent based modeling to explore architectural choices such as disaggregation, system choices such as the use of Cubesats in different orbits and policy choices such as mixes of commercial and government buses. The models will also be used to explore the effect of low earth orbit commercial launch.

It is anticipated that the successful candidate will engage in preparation of original manuscripts for conferences and journals as well as aid in the writing of proposals.

The position will be based at the SMART Centre in Singapore, located on the CREATE campus, an international research complex that has representatives from many renowned research institutions (e.g., MIT, ETH, Cambridge University, and UC Berkeley). Some visits to MIT might be possible. For more information on SMART, please visit <http://smart.mit.edu/>.

JOB REQUIREMENTS

The researcher is expected to participate in this research project while showing autonomy, creativity, and communication, teamwork, and leadership skills. Specific qualifications include:

- Ph.D. in an appropriate field such as astronautics or space systems engineering
- Knowledge of Matlab essential
- Knowledge of System Dynamics or Agent Based Modelling valuable
- Undergraduate degree in an engineering or science discipline required
- Excellent writing and speaking skills; ability to listen well and communicate tactfully.

WORK IN SINGAPORE

Singapore, at the crossroads of Asia, is a melting pot of cultures, nationalities and religions. It is a vibrant city-state and knowledge and talent hub where people in different fields create, grow and exchange ideas.

Singapore was the fifth most popular place to relocate worldwide over the last several years. (Source: *Cartus Survey of Top International Relocation Destinations*). The city-state is safe and it is also recognized as one of the cleanest and greenest cities in the world. Singapore also has one of the highest standards of living in the world, but has a reasonable cost of living that is lower than many western countries.

SMART seeks a post-doctoral candidate who is able to show a proven record of excellence in research, potential in the topic areas mentioned above and is ready to thrive in a dynamic, multi-cultural environment.

TERM OF APPOINTMENT

This will be a one-year appointment beginning approximately, April 1, 2018, with an option to renew for another six months. To apply, please submit your application on-line at: <http://smart.mit.edu/jobs-at-smart/current-open-positions.html>.