**Who are we?**

We are the University of Cambridge’s presence in Singapore, Cambridge CARES. Our activities are sponsored by the National Research Foundation’s CREATE programme. Our first research programme, Cambridge Centre for Carbon Reduction in Chemical Technology (C4T), is a collaboration between University of Cambridge, Nanyang Technological University and National University of Singapore.

Our team is comprised of world-class scientists and engineers working in a vibrant, fast-paced environment with great opportunities for knowledge and skills development.

**Who are we looking for?**

The project aims at a comprehensive virtualisation of an industrial park, i.e. a hierarchical representation of data and models associated with every entity in the industrial park, in order to exploit synergies for resource, energy, and emissions savings. The overall goal is, using ideas from Industry 4.0, Internet of Things, the Semantic Web, machine learning, and statistics, to create an expert system capable of providing quantitative decision support to stakeholders, planners, and policy makers.

The successful candidate will be expected to assume intellectual leadership in the development of the theoretical and mathematical foundations as well as the wider, ongoing development of our main software tool. This will involve keeping abreast of the latest web technologies, making key design decisions, and ensuring their realisation. Being part of a 3-member consortium will require close interaction with collaborators. Activities will include participating in research discussions with local industries and partners, overseas universities, and writing reports as required by the National Research Foundation (NRF) of Singapore.

The duration of the contract is for one year in the first instance.

**What skills do you have?**

- A PhD degree in a relevant discipline such as mathematics, computer science, (theoretical) physics/chemistry, engineering, or a related subject
- Excellent mathematical and programming skills
- An outstanding publication record in at least one of the research areas concerned
- Excellent oral and written communication skills
- The ability to work as part of a dynamic, multidisciplinary team of researchers

**What can we offer you?**

- A stimulating working-environment with friendly, highly motivated colleagues
- Opportunities to develop and implement new ideas in a creative environment
- A competitive salary in line with your skills and experience
- A one-year contract in the first instance, extendable following satisfactory performance
- A comprehensive medical insurance cover as part of your employment

Please note that this post is mainly based in the CREATE Tower at NUS University Town, Singapore and is likely to be suitable for recent graduates. To apply, please send your CV and cover letter (summarising the most relevant skills and experience that you have for the position) to cares@hermes.cam.ac.uk.