

Software Developer (CFD)

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?

We are looking for a talented and creative software developer / researcher to support the C4T research team. Primarily, we are looking for an individual dedicated to data-driven modelling, semantic representation and visualisation with some experience in computational fluid dynamics (CFD).

The project aims to develop a comprehensive virtualisation, i.e. a hierarchical representation of data and models associated with various entities. The overall goal is, using ideas from Industry 4.0, Internet of Things, the Semantic Web, machine learning, artificial intelligence and statistics, to create an expert system capable of providing quantitative decision support.

The successful candidate will work on the theoretical and mathematical foundations as well as the wider, ongoing development of our knowledge-graph and autonomous agents. This will involve keeping abreast of the latest web technologies.

The successful candidate will be expected to:

- Publish research results in high-quality international peer-reviewed journals.
- Develop CFD models to study the atmospheric dispersion of emissions.
- Design, develop, test, deploy, maintain, and improve software.

What skills will be helpful?

- A degree in a relevant discipline such as computer science, mathematics or physics.
- Experience with one or more CFD based dispersion modelling software such as WRF-CFD, EPISODE.
- Experience with or willingness to learn general-purpose programming languages such as Java, Python, JavaScript, C/C++, as well as version-control tools such as GIT. Training will be provided for those without programming background.
- Willingness to acquire software skills and knowledge about Semantic Web technology and knowledge graph.
- Excellent oral and written communication skills in English.
- 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 a satisfactory performance.
- Comprehensive medical insurance coverage as part of your employment.

Please note this post is mainly based in the CREATE Tower at NUS University Town, Singapore.

How to apply?

Please apply by uploading your CV and academic transcript to <https://talent.sage.hr/jobs/88a7200d-70d5-4edb-ae0f-59ddd4d1e0de>. If you have any questions, please feel free to reach out to the HR team at recruitment@cares.cam.ac.uk.