Fully funded iCASE PhD studentship: Computational / data science techniques to improve and integrate weather forecasting in business decision-making

Applications are invited for a four year full-time PhD studentship to work on a research project jointly with Imperial College London (the departments of Earth Science & Engineering, Physics and Mathematics and Shell (the Data Science Centre for Excellence).

The project is on the topic of data/computation science, and specifically will investigate how numerical weather prediction models can be improved and integrated to support decision-making in a variety of Shell’s global operations, such as new energies (https://www.shell.com/energy-and-innovation/new-energies.html) which include wind and solar power. The emphasis of the project will be on novel data and computational science techniques and their use in combining observational data and advanced numerical models to improve regional scale atmospheric forecasts and integrate these into business applications.

Applicants should have (or expect to obtain) a 2.1 level undergraduate degree (and preferably also hold a Masters level degree) in Mathematics, Physics, Engineering or a related numerate subject.

The project would suite applicants who are interested in further developing already existing experience in some or all of the following: computational methods, scientific programming, data science, machine learning, geophysical fluid dynamics. They should also have the ability to work with industrial partners and decision-makers.

The scholarship is fully-funded (fees and maintenance) by Shell and EPSRC under the latter’s Industrial CASE (iCASE) programme. Information and frequently asked questions on this scheme may be found here: https://epsrc.ukri.org/skills/students/industrial-case/

Further information on student eligibility may be found here: https://epsrc.ukri.org/skills/students/guidance-on-epsrc-studentships/eligibility/

To apply for this studentship please send a CV and cover letter to Professor Matthew Piggott (m.d.piggott@imperial.ac.uk) before 28 February 2020.