

Postdoctoral Research Fellowship

Project Title: Short-Term Forecasting for Utility-Scale Wind Farms

Scope of Research: This project is aimed at the short-term forecasting for utility-scale wind farms. The candidate will be required to develop models for short-term power forecasts, as well as dedicated event-based models for large utility-scale wind farms. To this end, the ideal candidate will have experience in ensemble-based Numerical Weather Prediction (NWP) models, statistical forecasting approaches, NWP correction techniques, as well as statistical and/or physical downscaling approaches.

The fellowship is open to all nationalities, but preference will be given to South African citizens. The candidate will be based in Stellenbosch full-time, and may be required to travel to conferences to present the research work that will form part of the project goals. The fellowship is offered for a period of 6 months with a remuneration of R180 00.

Please note that postdoctoral fellows are not appointed as employees and are therefore not eligible for employee benefits. Postdoctoral fellowships are awarded tax free.

Host: Department of Electrical and Electronic Engineering, Stellenbosch University, South Africa

Requirements:

- A PhD in Electrical Engineering (awarded in the last 5 years)
- Excellent communication skills in English (both written and verbal)
- Programming experience in Matlab, Python, as well as in a statistical language such as R
- Experience in Numerical Weather Prediction models such as WRF or HIRLAM
- Experience in Artificial Intelligence (AI) techniques

Additional Requirements:

- Experience in event-based forecasting models is an advantage
- Knowledge of power system operation is an advantage, but not required
- Experience working with large data sets

Commencement of Duties: 1 February 2020

Closing Date: 24 January 2020

Application:

Please send a letter of application, accompanied by a comprehensive curriculum vitae, including list of publications and the names and contact details of at least two referees, to Professor H. J. Vermeulen (vermeuln@sun.ac.za). Applicants should request their referees to forward confidential reports by the closing date direct to the same address as indicated above.