

Postdoctoral Research Fellowship

Project Title: Precision Forestry and Forest Operations in a Digital Transformation

Description: This is a joint appointment by the Stellenbosch University School for Data Science and Computational Thinking and the Department of Forestry and Wood Science. The appointment period is negotiable from one to three years. The successful candidate will ideally complement and contribute to the current expertise in the School and the Department in applying a range of data science related methods and processes to the area of forest operations and management. Expertise in machine learning related to remote sensing, forestry, or other land use would be a strong advantage.

The Fellow will be based at the School and will be expected to lead or contribute strongly to at least three subsidy-bearing publications per annum. In addition to the agreed research, the candidate will need to undertake some postgraduate supervision duties, contribute to writing grants and bring awareness of data science, machine learning and computational thinking by means of seminars, presentations, popular talks and the like. The Fellow will also be required to form part of Prof Bruce Talbot's research group, which in turn works closely with forest industry partners in various parts of the country.

Research: The candidate will be expected to make a substantial contribution to ongoing research initiatives with a focus on data, data systems, data analysis, machine learning and econometrics in a dynamic forest industry oriented environment. Topics will involve state-of-the-art analysis of data generated from machinery and from proximal and remote sensors including imagery (drone, aircraft, satellite) but will be prioritized and adjusted together with academic and industry partners on an ongoing basis.

Hosts: School for Data Science and Computational Thinking, and the Department of Forestry and Wood Science, Stellenbosch University.

Requirements:

- PhD in Data Science / Machine Learning / Artificial Intelligence on a topic relevant to the project (must have graduated within the last five years). Alternately a PhD in Forest Science, Agriculture, Geomatics or similar with a very strong focus on, and demonstrated knowledge of data science
- Evidence of the ability to publish in internationally acclaimed journals
- Previous experience in engaging with students and other stakeholders will be an advantage.

Remuneration: Negotiable between R 250 000 - R400 000 p/a (tax-free) depending on demonstrated skill set and publication record. Please note that postdoctoral fellows are not appointed as employees and they are therefore not eligible for employee benefits.

Commencement of duties: As soon as possible

Closing date: Friday 9th April 2021

Enquiries: 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 Prof. Kanshukan Rajaratnam at kanshu@sun.ac.za and Prof. Bruce Talbot at bruce@sun.ac.za.

Applicants should request their referees to forward confidential reports by the closing date directly to the same addresses.

For further details see <http://www.sun.ac.za/english/data-science-and-computational-thinking> and <http://www.sun.ac.za/english/faculty/agri/forestry>