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**Department Industrial Engineering**  
and  
**School for Data Science and Computational Thinking**  
**Postdoctoral Fellowship**

**One position in the following area of specialisation:**

▪ **Evolutionary Learning, Data Mining, Machine Learning**

*The Department of Industrial Engineering and the School for Data Science and Computational Thinking is looking to jointly appoint a postdoctoral fellow to conduct research in the intersection of evolutionary learning, data mining and machine learning.*

*The Department of Industrial Engineering focuses on the following areas of research to improve global competitiveness: Operations Research, Data Science in Industrial Engineering; Operations Management and Logistics; Advanced Manufacturing; and Engineering and Technology Management.*

*The School for Data Science and Computational Thinking was launched in July 2019 with a vision to be a world-class institution in data science and computational thinking in and for Africa. The School is rapidly growing with diverse set of academics focusing on both the science of data science as well as the application of data science in a diverse set of fields.*

*The successful candidate will be expected to join both the Data Science Research Group of the Department of Industrial Engineering and the School for Data Science and Computational Thinking to advance Data Science research and teaching. The successful candidate will be expected to keep abreast of the latest academic content and practical applications within Data Science. The candidate will be located within the School for Data Science and Computational Thinking.*

**Roles:** *This fellowship is intended for a young researcher who has obtained a PhD within the last five years in Engineering, Computer Science, or Applied Mathematics with a focus on Evolutionary Learning, Data Mining and Machine Learning, and would like to explore the field further. The term is for three years and can be renewed depending on funding and performance. The successful candidate will work with other researchers in the above focus areas, to further develop and investigate the application of these focus areas in relevant application domains.*

**Duties:** Research participation and support, publication of research papers, collaboration with researchers and postgraduate students, co-supervision of postgraduate students and limited undergraduate teaching, and provide assistance to the consulting efforts of the School. Since this is a joint appointment, the successful candidate will spend half of his/her time on the research activities of the School (reporting to Prof Rajaratnam) and the rest on research within the Data Science Research group and postgraduate supervision activities of the Department.

**Requirements:** A PhD in Engineering, Computer Science or Applied Mathematics, with a focus on Evolutionary Learning, Data Mining, and Machine Learning • An excellent academic record • A publication record with at least one article in an accredited journal • Excellent computer programming skills • Good understanding of the broad fields of Artificial Intelligence and Data Science • Good verbal and written communication skills (Note the requirements for the cover letter below, detailing your adherence to these requirements)

**Recommended:** Experience in Support Vector Machines, Concept Drift, Meta-Heuristics for Dynamic Optimization Problems • Experience in collaborative research environments • Good organisational skills • Fluency in Afrikaans and/or English

**Please note:** Postdoctoral fellows are not appointed as employees and are therefore not eligible for employee benefits Postdoctoral fellowships are exempt from income tax.

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**Commencement of duties:** 1 August 2021 or as per agreement

**Closing date:** 15 July 2021

**Enquiries:** Prof Kanshu Rajaratnam ([kanshu@sun.ac.za](mailto:kanshu@sun.ac.za)), Prof Andries Engelbrecht ([engel@sun.ac.za](mailto:engel@sun.ac.za))

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*The University will consider all applications in terms of its Employment Equity Plan, which acknowledges the need to diversify the demographic composition of the staff corps, especially with regard to the appointment of suitable candidates from the designated groups.*

*The University reserves the right not to make an appointment.*

*Applicants should forward an application cover letter listing all the post requirements and recommendations with motivations why you believe that you meet the requirements, a comprehensive CV and two confidential reports by independent referees by the closing date direct to the above address.*