



University of Fort Hare
Together in Excellence

POSTDOCTORAL RESEARCH FELLOWSHIP

Fuzzy Logic Algorithms (1 post)

There is an ever-increasing need to utilise sophisticated artificial intelligence to improve the usage factor of renewable energy systems. The projects aims at using state-of-the art software and fuzzy logic methodologies as machine learning tools for the forecasting of PV system performance.

The key performance areas include:

- Successful formulation, design and application of Fuzzy Logic and Machine Learning Algorithms
- Utilisation of these algorithms for accurate short-term photovoltaic performance predictions
- Ability to use various Fuzzy data mining techniques
- Development of multi-rule-based Fuzzy Decision models applied to photovoltaic performance

Minimum requirements:

- Doctoral degree in Applied Mathematics, Mathematical Statistics, Physics, or related field obtained within the last 4 years
- A minimum of 3 years relevant experience in the abovementioned research areas
- A track record of publications in DHET accredited journals

Expected outcomes:

- Development of novel processes and models
- A minimum of 4 publications in DHET accredited journals
- Co-mentoring of postgraduate students
- Assist with teaching and learning in primary department

Enquiries and further details regarding this post, may be directed to Dr. O. Ndiweni via email: ondiweni@ufh.ac.za. Applications must be sent to postdocs@ufh.ac.za and cc **Dr. Ndiweni** on or before **22 March 2024**. Please consider your application unsuccessful if you have not received feedback within 3 weeks of the closing date.

