Vacancy Announcement

A Research Project titled, ***"Deep Learning Based Optimization of Energy Management System for Microgrid with Renewable Energy Sources: A Case Study for Saint Martin's Island"*** funded by the East West University Center for Research and Training (CRTEWU), is seeking applications for the following position.

Research Associate/Assistant:

Details of the position are given below:

Duties and responsibilities (Research Associate):

The primary role would be a Research Associate. Key responsibilities would include:

- Conduct in-depth literature reviews on deep learning-based energy management and renewable energy forecasting.
- Develop and implement machine learning and deep learning models for energy forecasting.
- Assist in acquiring, preprocessing, and analyzing energy datasets from various sources (BMD, PGCB, BPDB, etc.).
- Manage cloud computing resources (Google Cloud, AWS, Google Colab Pro+) for model training and validation.
- Prepare progress reports, presentations, and research papers for submission to international journals.
- Supervise the Research Assistant (RA2) in data collection, model testing, and documentation.
- Coordinate with stakeholders, such as SREDA, IDCOL, and BPDB, for data acquisition and project insights.

Qualification:
- M.Sc. and B.Sc. in Electrical and Electronic Engineering (EEE)/Computer Science and Engineering (CSE), or a closely related field.
- A strong academic background with a thesis or final year project in renewable energy, power systems, machine learning, or a similar area is highly preferred.
- Proficiency in programming languages, especially Python or MATLAB.

Experience:
- Prior hands-on experience with deep learning frameworks such as TensorFlow, Keras, or PyTorch.
- Familiarity with renewable energy systems, microgrids, and energy management systems (EMS) is a significant advantage.
- Previous research experience and a track record of publications in relevant journals or conferences would be a strong plus.

Job Type & Duration:
- This is a full-time contractual position.
- Duration: 8 months

Salary: 20000/- BDT

Duties and responsibilities (Research Assistant):

The primary role would be a Research Assistant. Key responsibilities would include:

- Support data collection efforts from publicly available sources and assist in dataset cleaning.
- Implement basic data preprocessing techniques using MATLAB, Python, and Excel.
- Conduct exploratory data analysis and visualization to identify patterns and trends.
- Assist in running simulations, executing model training, and validating results.
- Maintain project documentation and organize research findings in Notion and GitHub.
- Support the preparation of reports, presentations, and research publications.
- Assist in travel-related activities for data collection and stakeholder meetings.

Qualification:
- B.Sc. in Electrical and Electronic Engineering (EEE)/Computer Science and Engineering (CSE), or a closely related field.
- A strong academic background with a thesis or final year project in renewable energy, power systems, machine learning, or a similar area is highly preferred.
- Proficiency in programming languages, especially Python or MATLAB.

Experience:
- Prior hands-on experience with deep learning frameworks such as TensorFlow, Keras, or PyTorch.
- Familiarity with renewable energy systems, microgrids, and energy management systems (EMS) is a significant advantage.
- Previous research experience and a track record of publications in relevant journals or conferences would be a strong plus.

Job Type & Duration:
- This is a full-time contractual position.
- Duration: 8 months

Salary: BDT 15,000/= (consolidated per month)

Application deadline: 20th September 2025

Application Procedure:

Interested candidates should submit an application to Dr. Ratil Hasnat, Principal Researcher at ratil.hasnat@ewubd.edu with a current CV by 20 September 2025. Applicants must mention the name of "Position" in the subject line of email.

[NB: Only shortlisted applicants will be contacted for the next round of selection.]