

Position: Postdoctoral Fellow in Smart Grid Energy Management and Optimization

Seeking Postdoctoral Research Fellow at the Department of Electrical and Computer Engineering at the University of New Brunswick, located in Fredericton, New Brunswick, Canada.

The candidate will conduct thorough investigations in multiple smart-grid projects in collaboration with industry partners, including:

- (1) Vehicle to grid optimization and control;
- (2) Distributed control for frequency support/regulation;
- (3) Grid standards and interoperability (IEEE 2030.5);
- (4) Energy management in off-grid microgrids with intermittent DERs.

This role will involve heavy emphasis on producing peer-reviewed publications, writing technical reports for utility and industry stakeholders, and mentoring of graduate/undergraduate students.

The candidate shall possess:

- 1) Strong publication record in high-impact journals
- 2) Strong analytical skills and curiosity for research
- 3) Good software development skills in Python, or MATLAB or related language (LabVIEW a bonus!). OPAL RT, PSSE, Power Systems Toolbox are also excellent skills to have for grid modeling and simulation studies.
- 4) Relevant knowledge of standards such as IEEE 2030.5 and IEEE 1547
- 5) Ability to organize and mentor graduate students.

Qualifications: PhD in Engineering or Computer Science with relevant experience in smart-grids.

Salary Range: \$45,000-\$60,000 CAD per year, including benefits.

Start Date and Duration of Appointment: Position starts on June 1, 2024 (or as soon as possible), with an expected duration of not less than 12 months with the potential to renew for up to 2 years. Applications will be accepted until the position is filled.

Application Process

Applications will be considered immediately. Position will be open until filled. Please e-mail the following to shivam.saxena@unb.ca if interested.

1. An expression of interest highlighting how you satisfy the above criteria, including earliest availability. (Max 1.5 pages)
2. CV
3. List of 3 references

About the Primary Investigator

Dr. Shivam Saxena: Assistant Professor, Department of Electrical and Computer Engineering, University of New Brunswick. <https://shivenergy.wordpress.com/>

Acknowledgements:

UNB recognizes and respectfully acknowledges that all UNB interactions in Fredericton take place on traditional lands of Wolastoqiyik.

The University of New Brunswick is committed to employment equity, fostering diversity within our community, and developing an inclusive workplace that reflects the richness of the broader community that we serve. We welcome and encourage applications from all qualified individuals, including women, visible minorities, Indigenous persons, persons with disabilities, and persons of any sexual orientation, gender identity, or gender expression. Preference will be given to Canadian citizens and permanent residents of Canada.