

Funded PhD Student, Fault detection and diagnostics

Building Performance Research Center
Carleton University, Ottawa, ON

We are seeking a PhD student for an industry-funded research project to develop, implement, and test new fault detection and diagnostics algorithms for variable air volume terminal units and air handling units.

Qualifications

Ideal candidates are expected to have following attributes:

- Background in building engineering or related areas (mechanical engineering, systems and computer engineering, electrical engineering, engineering physics, civil engineering);
- Knowledge of building energy modelling techniques and HVAC systems;
- Familiarity with machine learning and data science;
- Knowledge of programming environments such as R, Python, and Matlab;
- Ability to develop new skills and explore new ideas.

About DBOM

Data-driven building operation and maintenance (DBOM) is a research group that operates within the **Carleton Building Performance Research Centre**. DBOM research group examines methods to optimize the operation of commercial and institutional buildings for comfort and energy use. The group employs the state-of-the-art data mining techniques on building operation and maintenance (O&M) databases to derive methods that guide analytics-driven indoor climate control and predictive maintenance decisions.

About Ottawa

Located in Ottawa, Ontario, Canada's capital city has a population of almost one million and reflects the country's bilingual and multicultural character. Carleton's location in the nation's capital provides many opportunities for research with private and public sector partners including federal research laboratories. To learn more about our university and the City of Ottawa, please visit www.carleton.ca/about.

Application instructions:

Candidates are encouraged to highlight qualifications relevant to the areas of special interest in building performance analysis, data mining, energy modelling. Apply by sending your CV, contact information for two references, and a recent publication to burak.gunay@carleton.ca and liam.obrien@carleton.ca.

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closing date: until the position is filled