

Verschuren Centre
Mechanical Engineer– Renewable Energy Team
Location - Sydney, Nova Scotia

Verschuren Centre

The Verschuren Centre for Sustainability in Energy and the Environment was established to facilitate a transition to a green and circular economy through supporting innovative clean technology commercialization. The centre has an established team of expertise in key areas in order to assist companies advance IP and accelerate uptake in manufacturing and primary production industries. Areas of specialty include industrial and agriculture bioprocessing, carbon and polymer materials, thermal energy transitioning & storage and climate mitigation in aquaculture. Through the Centre's collaborative approach and cutting-edge pilot scale test facilities clients can develop their IP, while connecting with partners, markets and business development support to reach their market.

Job Description

As a subject matter expert and senior engineer, you will lead efforts to evaluate and develop state-of-the-art wind turbine modeling and simulation tools. You will support resolution of methods to detect on-coming efficiency, reliability, and failures in both simulation and field data. You will develop technical strategies to improve the robustness and reliability of the wind turbine operation.

Essential Responsibilities:

Research, develop, verify/validate, document, and deploy state-of-the-art software tools, methods, criteria, and best practices that will improve assessment of wind turbine dynamics, stability, and reliability
Provide support for root cause analysis of wind turbine failure
Provide support to improve wind turbine simulation and modeling
Support the development of improved control that better accounts for the true wind turbine system dynamics

Qualification/Requirements:

PhD/MS in Mechanical, Wind, Systems, Aerospace Engineering, Computational Sciences
Expertise and demonstrated experience with wind turbine simulation and modeling (OpenFast, Qbladem, HAWC2)
Demonstrated ability to perform scientific computing, adopt coding, collaborate best practices, and learn new languages.
Proficient in Python
Demonstrated and strong ability to clearly communicate complex/technical information and to work effectively in cross-functional teams

All interested Candidates are asked to submit their resumes to info@verschurencentre.ca prior to June 14th, 2021.