SENIOR ZERO-EMISSION BUS SIMULATION MODELLER

**Position Overview**

The Canadian Urban Transit Research & Innovation Consortium (CUTRIC) is currently seeking to hire a Senior Zero-Emission Bus (ZEB) Simulation Modeller to work with our dynamic research team involved in ZEB performance modelling to aid cities and transit agencies across Canada and the US plan their fleet electrification.

**About CUTRIC’s Culture**

CUTRIC is a highly dynamic and fast-paced innovation consortium focusing on technology championship. Despite being a not-for-profit, the team culture operates along the lines of a fast-paced (frequently high-pressure) start-up technology company.

CUTRIC team members are interdisciplinary, widely knowledgeable, science- and technology-driven, and passionate about the environment and mobility innovation.

CUTRIC welcomes and supports diversity in the workplace because we believe it makes us stronger and smarter. Candidates with diverse experiences and backgrounds are encouraged to apply.

**Role Summary**

The Zero-Emission Bus (ZEB) Simulation Modeller will grow to be an integral team member of CUTRIC’s research team.

The Zero-Emission Bus (ZEB) Simulation Modeller will need to become familiar with all of CUTRIC’s modelling projects in the low-carbon smart mobility sector in North America.

The Zero-Emission Bus (ZEB) Simulation Modeller will liaise with CUTRIC team members across Canada, in English, to undertake project activities as required.

The Zero-Emission Bus (ZEB) Simulation Modeller will be expected to communicate openly, regularly, professionally, and transparently with colleagues and external stakeholders on a regular basis to develop positive member and stakeholder relations over the long-term.

**Diversity**

CUTRIC actively pursues diversity within its employment framework. Women, people who identify as women, transgendered people, and people who identify as a non-binary gender are strongly encouraged to apply.

**Role & Responsibilities**

The Zero-Emission Bus (ZEB) Simulation Modeller will be expected to carry out the following tasks in a highly independent, accountable, professional and responsible manner:

1. Complete predictive modelling and empirical analyses deliverables and contracted requirements per project following best practices established in the team.
2. Perform specific tasks relating to fleet modelling (duty cycle generation, energy consumption modelling and analysis, etc.) and prepare deliverables (clearly labelled and cleaned results files for clients, presentation slides, reports etc.) at the highest levels of professional writing.
3. Perform robust and in-depth literature reviews, empirical data analyses as required to aid the modelling projects that RoutΣ.i™ team undertakes and prepare outputs at the highest level of professional writing.
4. Coordinate with the modelling team to prepare deliverables ensuring accuracy and timeliness, including impeccable English prose in written report submission.
5. Prepare reports and presentations per the needs of the project and work with the team to ensure client-ready products are delivered to the ZEB Project Manager and ZEB Team Lead for review and reporting to the C.E.O and client.

**Critical Skills, Competencies and Educational Requirements**

The Zero-Emission Bus Simulation Modeller will be expected to have the following skills, competencies, and educational achievements:

*Minimum*

1. Fluent English language skills required in written and spoken form.
2. Fluency in French is considered a highly valuable asset.
3. Demonstration of a high-level of attention to detail and precision.
4. Demonstration of a high-level of commitment to professionalism in written, verbal and in-person contexts.
5. Demonstration of a high-level of commitment to confidentiality and non-disclosure respect for the concept of privacy within a corporation.
6. At least **five (5) years** of full-time work experience in computer programming/coding, **ideally relating to vehicle performance or other comparable fields.** Candidates that have similar or relevant experience and deep knowledge using other software tools that support powertrain or propulsion modelling purposes will also be considered.
7. **Minimum Master’s degree in engineering, physics or an allied field** (e.g. mechanical engineering with a focus on electrified propulsion systems; or computer sciences with specialization in alternative transportation technologies) with a strong background in coding.
8. Demonstration of a high-level of competency with audio-visual technologies and technical as well as communications software (e.g. GitHub or Zoom Communications tools) with an ability to troubleshoot in real-time during multi-stakeholder meetings.
9. Strong teamwork ethic.
10. Commitment to working with team members locally and digitally across the country.
11. High degree of adaptability to work under pressure in a dynamic work environment.
12. A positive attitude and willingness to think creatively and innovatively to resolve problems and overcome challenges.
13. A team player mindset and proactive dynamism in problem-solving.
14. A strong focus on time efficiency and waste reduction (in time and resources) to achieve deliverables.
15. Demonstrated commitment to climate change action and an interest in sustainability in transportation.
16. Expressed interest in working in a small company with a highly diverse workplace – including gender, racial and religious diversity.
17. Evidence of an interest in lifelong learning

***Optimal***

1. Evidence of experience working within a small to mid-sized business/enterprise environment.

2. Evidence of an ability to juggle several files at once in a highly organized and competent fashion.

3. Evidence of commitment to documenting actions and documenting follow through commitments and deliverable completion.

4. Evidence of a committed work ethic and the pursuit of excellence in professional or personal life.

**Salary Range**

$70,000-$80,000 depending on education, experience and aptitude.

**Deadline:**

This posting will close on March 22nd 2022, 11:55 pm EST.

In submitting my application for a job to the Canadian Urban Transit Research & Innovation Consortium (CUTRIC), I acknowledge that I consent to receiving information from CUTRIC about its jobs, initiatives, and events.

**Health and safety: Full vaccination requirement**

To maintain a safe and healthy workplace, new staff at CUTRIC are required to demonstrate evidence of full (double) vaccination against COVID-19 using an approved Health Canada vaccine prior to their first day of work at CUTRIC. Proof of vaccination and verification of vaccination documentation will form part of the offer process and are a condition of employment at CUTRIC, subject to Ontario’s Human Rights Code.

**How to apply?**

[Apply online](https://secure.collage.co/jobs/cutric-crituc/27929)

Candidates must ensure their Cover Letter refers to this specific job posting and the curriculum vitae/resume and cover letter both demonstrate how the candidate meets the minimum skills and competencies required for this position.

**Location**

CUTRIC’s team has always been highly digital in nature. Due to COVID19, CUTRIC has made the decision to work remotely and support work-from-home arrangements with all employees until December 2022 at least. The only exception to this rule may be bi-annual CUTRIC staff professional development “retreats”, which may require travel to Toronto, Montreal, or Vancouver when it is safe to do so. Therefore, this position may be located anywhere in Canada as long as the candidate has continual or reasonably frequent access to high fidelity internet as 100 percent of CUTRIC’s daily business activities are carried out digitally – including video-based digital meetings, which require high fidelity Wi-Fi.