**Postdoctoral Fellow   
Term: 1 year (renewable)**

**Faculty / Division:** Department of Civil & Mineral Engineering

**Department:** Department of Civil & Mineral Engineering

## Campus: St. George (downtown Toronto)

**Description:**The Transportation and Air Quality Research (TRAQ) group in the Department of Civil & Mineral Engineering, University of Toronto invites applications for the position of Postdoctoral fellow (Limited Term) for air quality sensing, modelling, and related software development. The selected researcher will be responsible for the development of novel air quality sensing protocols and empirical methods to predict traffic-related air pollution at a fine resolution.

**Qualifications:** Candidates require a PhD in a relevant scientific field. Demonstrated academic and research expertise in the area of environmental sensing and modelling, spatio-temporal statistical and mathematical analysis, uncertainty and risk analysis, and programming and software development. Experience in statistical analysis and programming (Fortran, Python, Matlab, C++, and experience in shell scripting on UNIX operating systems, and parallel programming) and software development is highly desirable. The candidate must have a strong publication record in the field of environmental sensing and modelling. They will have the ability to work independently and direct projects and will have experience preparing technical reports and manuscripts for submission to peer-reviewed journals and presenting findings at local, national, and international conferences.

**Key Responsibilities:**

* Designing and generating new advanced spatio-temporal statistical and mathematical techniques for air quality and traffic emissions.
* Planning, executing, and overseeing research projects related to traffic and emission modelling.
* Developing operational software based on novel methods for traffic and emission prediction.
* Assisting with the preparation of research proposals.
* Supervising graduate students.
* Working with multi-disciplinary, multi-institutional teams.
* Presenting research findings to PI and other members of the research team.

The candidate is expected to perform research with a high degree of independence and will design, direct, execute, analyse, and present in written and oral forms novel investigative studies that build on and/or take advantage of the resources and expertise within the research group.

**If interested, please submit CV and cover letter to** Professor Marianne Hatzopoulou, [marianne.hatzopoulou@utoronto.ca](mailto:marianne.hatzopoulou@utoronto.ca) before January 25, 2021.