Graduate Research Opportunity – Dr. Karim Malik

The University of Windsor's School of the Environment in the Faculty of Science seeks highly motivated graduate students at the MSc and PhD levels to conduct cutting-edge research.

The University of Windsor is committed to excellence in teaching and research, offering a friendly and supportive environment for living and learning. It is Canada's southernmost university, and its border location provides unique cultural, recreational, and educational opportunities.

Research areas

The areas of interest include but are not limited to the following: Land-use/Landcover change modelling, spatial modelling with GIS and R, development of deep-learning tools for predicting Snow parameters, development of computer vision tools for anthropogenic disturbance monitoring, extracting Lake surface temperature using Remote Sensing images, machine learning for terrestrial change detection, development of GIS-based bench-mark datasets for artificial intelligence modelling.

About the School of the Environment at the University of Windsor

The University of Windsor's School of the Environment (SoE) and the Great Lakes Institute for Environment Research have world-class research facilities and strong ties with NOAA Great Lakes Environmental Research Laboratory (GLERL) and the Cooperative Institute for Great Lakes Research (CIGLR) at the University of Michigan. Both SOE and GLIER have distinguished researchers whose research investigates a broad spectrum of environment-related problems using state-of-the-art techniques and tools. Graduate students therefore have immense opportunity to conduct cutting-edge research under the supervision and mentorship of renowned researchers. The School of the Environment offers graduate programs designed to develop professional competence and prepare students to tackle a variety of societal and global environmental problems through the lens of research driven by technical and empirical approaches to understanding the Earth's systems.

Prospective Graduate Student's background and skills

Potential candidates with a background in Geographic Information Systems (GIS)/GIScience, spatial analysis and modelling, remote sensing, earth and atmospheric sciences and environmental science, or a related discipline are invited to apply. Candidates with prior knowledge and experience in Python and R programming languages with applications in Earth Observation data processing are preferred. Candidates with experience in advanced modelling using GIS software (e.g., ESRI's ArcGIS Pro and QGIS) may also be considered. Prior experience in Earth Observation data processing and analysis using computer vision, and machine learning deep-

learning libraries such as Pytorch and Tensorflow, OpenCV and Scikit Learn will be considered a great asset.

Supervisor contact and graduate admission information

The expected start date for selected candidates is September or Fall 2024. Applications for January or Winter 2025 start may be considered subject to the availability of the graduate positions. The graduate research opportunity will remain open until the positions are filled. Prospective MSc and PhD students, please refer to the information here on the application process and admission requirements.

Interested candidates should contact Dr Karim Malik (at karim.malik.amid@gmail.com) with an expression of interest summarizing their qualifications and research interests, CV, copies of university transcripts, relevant publications, and contact information of two references as a single PDF file. For international applicants, please include your TOEFL/IELTS scores (if applicable).