Climate Change Induced Displacement Simulation and Serious Game

Combining agent-based modeling with real-world climate and migration data, the project will simulate how individuals and communities respond to events such as sealevel rise, drought, or extreme storms.

1. Hosting Institution- York University, Canada

2. Faculty Supervisor

Name:	Maleknaz Nayebi
Position/ Title:	Associate Professor
Faculty:	Lassonde School of Engineering
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Biography:	www.maleknazn.ca/ https://scholar.google.com/citations?user=uSWqDhwAAAAJ&hl=en&oi=ao

3. Time Frames for Hosting Scholar

January 2026- March 2026

May 2026- August 2026

September 2026- December 2026

January 2027- April 2027

May 2027- April 2027

September 2027- December 2027

4. Research Project

Project Title:	Climate Change Induced Displacement Simulation and Serious Game
Project Description:	The proposal aims to develop an interactive simulation platform and serious game to model and communicate the human experience of displacement caused by climate change. Combining agent-based modeling with real-world climate and migration data, the project will simulate how individuals and communities respond to events such as sealevel rise, drought, or extreme storms. The serious game component will allow players—ranging from policymakers to students—to explore complex decision-making scenarios from the perspectives of displaced individuals, host communities, and governments. This tool is designed not only for scientific analysis but also as an educational and empathy-building experience to support policy design, public engagement, and resilience planning.
Preferred Academic Background and Research Skills:	ML, GIS, Climate Science or Environmental Studies, Social Science

5. Leadership, Community Engagement and Cultural Activities (recommended)

Conferences, Government and stakeholder engagements, exhibitions, community engagement events.