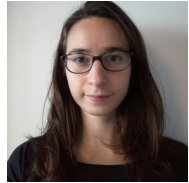


# Transformative Disaster Risk Governance Webinar Series

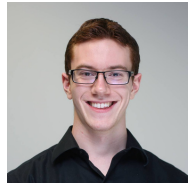
## The Role of Engineering in Disaster Risk Management

### Guest Speakers

*Florence Mainguenaud is a PhD student at Aix-Marseille University and York University. Her research focuses on the spatialized probabilistic study of flood risk assessment in areas protected by dikes. Florence is a Civil engineer from the National Institute of Applied Sciences of Rennes in France. For her undergraduate project, she explored the possibility to develop a probabilistic estimate of ground settlement due to floating foundations in Okayama University, Japan. She won 2 student contests from Cimbeton in 2017 and Saint-Gobain in 2018.*



*Michael De Santi is a MASC candidate in the Department of Civil Engineering at York University and a member of the Safe Water Optimization Tool (SWOT) team at York University's Dahdah Institute for Global Health Research. The SWOT project is an open-source online tool that uses routine water quality data to improve water safety refugee and internally displaced person settlements. Michael's research focuses on researching and developing new artificial neural network and data driven modelling tools for the SWOT project. Michael is an Engineer in Training with a BAsC in Civil Engineering from the University of Toronto. Prior to beginning his graduate studies, Michael worked for two years with Jacobs Engineering Group working as a Water Design Specialist on the Toronto Basement Flooding Protection Program.*



*Everett Snieder is a second year PhD candidate at York University. His research is centered around developing machine learning-based flood forecasting models, under the supervision of Dr. U. T. Khan. He holds a master's and undergraduate degree from York University and the University of Guelph, respectively. Everett has spent two years in industry, working in industries including municipal infrastructure and environmental consulting. He is the recipient of the NSERC Postgraduate Doctoral and Enbridge Graduate scholarships.*



# Transformative Disaster Risk Governance Webinar Series

## The Role of Engineering in Disaster Risk Management

### Webinar Organizer and the Session Chair

*Dr. Usman T Khan is an Assistant Professor and Graduate Program Director of Civil Engineering at York University. Prof Khan's research interests lie in Water Resources Engineering, focusing on urban hydrology, including flood risk assessment, sustainable water resource management, and the impacts of climate change on these systems. Prof Khan specializes in developing novel machine learning and artificial intelligence methods for various engineering applications. The role of Civil Engineering in creating vibrant, liveable and sustainable cities is a strong motivator for Prof Khan. He is committed to using his professional practice to meet the challenges that face the urban environment*



### Agenda

9:30	Usman Khan	Introduction
9:35	Florence Mainguenaud	Knowledge gaps of flood risk assessment on levee systems
9:45	Michael De Santi	Keeping drinking water safe in humanitarian response with machine learning
9:55	Everett Snieder	Flood early warning systems using machine learning flow forecasting models
10:05	Q&A	
10:20	Panel discussion	
10:35	Usman Khan	Closing remarks

### Date/Time and Location

June 18, 2021

9:30 am-10:40 am EDT, Online.

### Registration

Please register [here](#).