

Risk Visualization for Global Natural Catastrophe Modelling

The Opportunity:

The Risk Analytics Lab at Dalhousie is looking for a summer research intern with strong GIS skills to work with an interdisciplinary team on a joint NSERC/Industry funded research project in the area of natural hazard risk assessment and visualization. The intern would work with Dalhousie based researchers and industry partners on a project that explores visualization of Natural Catastrophe risks. The successful candidate should be self-motivated and demonstrate a strong work ethic and ability to work collaboratively within a team environment.

Qualification:

- Passion for working with maps and map data
- Good working skills with GIS software such as ArcMap, ArcCatalog, and ArcServer
- Working with Spatial Analyst and the Arc Toolbox
- Understanding of online GIS resources, such as elevation data and landuse data.
- Patience with repetitive tasks and a meticulous attention to detail
- Some familiarity with spatial database technology such as PostGIS would be an asset
- Some familiarity with Linux, SVN, and PHP would also be an asset

The Lab

The Risk Analytics Lab is an interdisciplinary research lab based in the Faculty of Computer Science, Dalhousie University, Halifax Canada. The lab explores the design and implementation of tools for quantifying, analyzing, managing, and optimize risk with a particular focus on event based risk modeling, natural and man-made catastrophic events and their potential impact, insurance and reinsurance analytics, and applications in policy, planning, and emergency response. With industrial partners focused on insurance, reinsurance, and financial risk modelling, and academic partners from disciplines including oceanography, business, and statistics, we pursue research in stochastic simulation, Dynamic Financial Models, Risk Optimization, Catastrophe Models, Spatial OLAP, High Performance Computing, and Risk Visualization.

To Apply or request for more information

Please send your resume, an (unofficial) copy of your transcript with a cover letter describing your interest to Prof. Andrew Rau-Chaplin (arc@cs.dal.ca). This is a full time 12-16 week research intern position to start in May 2012 with the possibility of part-time work after that.