PH.D CANDIDATE IN CIVIL AND ENVIRONMENTAL ENGINEERING

164 Boutwell St. Manchester, NH 03102

Application - Research Engineer, Catastrophe Risk & Data - Verisk

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July, 16 2025
Dear Hiring Manager,
I am writing to apply for the position of Research Engineer, Catastrophe Risk & Data which I came across on LinkedIn. My experience and research interests align perfectly with this position, and I believe I would be an excellent choice for the role.
The focus of my doctoral research has been developing models to assess the consequences of floods. In particular, an important aspect of my research is developing consequence models that account for variation in building characteristics which are typically excluded standard damage functions (e.g. Hazus, HEC-FDA). This work relies heavily on acquiring, understanding, and analyzing data from a variety of sources to produce meaningful insights.
I also have a demonstrated ability to put my research into action. As a research fellow with the U.S. Army Corps of Engineers, I have contributed to the development of Corps tools used for real-world natural hazard risk and consequence analyses. Specifically, I implemented new methods in USACE's "go-consequences" tool to estimate economic losses and greenhouse gas emissions caused by flood exposure to residential buildings, accounting for building-level attributes not previously considered in existing methods.
Thank you for taking the time to review my application. I am excited about the opportunity to excel in this position, and I hope to hear from you soon!
Sincerely,
Sebastian Rowan