

Climate Risk Map: An Open-Source Platform for Climate

Risk Lab is seeking collaborators from Electrical & Computer Engineering.

Project Overview

The Climate Risk Map is an open-source platform designed to analyze and visualize climate risks to critical infrastructure, particularly the power grid. This tool integrates geospatial and climate data to support research, education, and industry applications in understanding the financial impacts of climate change, focusing on the Washington State power grid.

Why this Matters

- Climate risks are increasingly **affecting power systems**—causing outages, grid stress, and financial losses.
- Utilities, policymakers, and insurers need better open-source data tools to assess and mitigate these risks.
- Our platform is a **collaborative tool**, allowing students to engage with industry professionals and work on real-world technical challenges.

Opportunities for ECE Students & Faculty

We actively engage with utility companies, insurers, and policymakers, incorporating their feedback to ensure our platform meets real-world needs. We are looking for software developers, data engineers, and power systems researchers to contribute in the following ways:

- **Software Development -** Improve geospatial data processing, backend APIs, and frontend visualization.
- **Open Data Power Systems Analysis** Validate and model climate risks using open data for real-world grid scenarios in collaboration with industry partners.
- **Industry Engagement -** Work with local utilities to shape data-driven climate risk strategies.

Get Involved

If you or your students are interested, let's discuss how we can integrate this into coursework, capstone projects, or independent research. This is an opportunity for students to engage with industry professionals, contribute to an impactful open-source project, and gain hands-on experience in climate and power systems analysis.

Contact

Please send an email to both:

Phillip Bruner, Lab Director - <u>pdbruner@uw.edu</u> Eric Collins, Tech Lead - <u>ecol07@uw.edu</u>

