

## POSTDOCTORAL FELLOW

### **Equitable Mitigation, Adaptation, and Resilience for Interconnected Infrastructure Systems**

PIs: Professors Michael Craig, Parth Vaishnav, Johanna Mathieu, and Carina Gronlund  
School for Environment and Sustainability  
Industrial and Operations Engineering  
Department of Electrical Engineering and Computer Science  
Institute for Social Research  
University of Michigan, Ann Arbor

Start date: Flexible

Term: One year, full-time, with optional 1-year extension

Location: Ann Arbor, Michigan (flexible)

Salary: \$60,000 (plus benefits) (negotiable)

The PIs invite applications for a one-year Postdoctoral Research Fellowship. The fellow will lead highly interdisciplinary projects that aim to guide deployment of electric power and buildings infrastructure given climate adaptation, climate mitigation, air quality, thermal comfort, health, and equity objectives. Research extensions might also incorporate transport and natural gas infrastructure. A key thrust of the project, funded internally by the University of Michigan, is to develop novel methods for joint planning of electric power investments, building construction or retrofits, and the synergistic operation of both infrastructures. Possible near-term applications of the fellow's work could include supporting the City of Ann Arbor's efforts to establish an exemplar net-zero neighborhood that centers equity and climate resilience. The work is expected to yield high-impact peer-reviewed publications, form the basis for large interdisciplinary grant proposals, and generate real-world impacts and insights for policymakers.

The successful candidate will join a cooperative group of postdoctoral, PhD, MS, and undergraduate researchers at the School for Environment and Sustainability. This includes Prof. Craig's [ASSET Lab](#), Prof. Vaishnav's [Heating with Justice project](#), Prof. Mathieu's [power systems research group](#), and Prof. Gronlund's Weatherization and Health Effects project. The fellowship will offer numerous professional development opportunities, including mentorship of students and collaboration on other research projects. Opportunities will be tailored based on the fellow's career goals.

Applicants should hold a PhD in energy or building systems, engineering, operations research, risk analysis, or a similar field. Required and desired training, experience, knowledge, and skills are:

- Formal training and experience with computational modeling and/or optimization is required
- Strong written and oral communication skills are required
- Strong programming skills (e.g., R, Python, and/or MATLAB) are required
- Engagement with communities and/or policymakers is preferred
- Formal training and experience with social sciences, health sciences, and/or economics is preferred

We will consider applications on a rolling basis until the position is filled. To apply, submit one PDF with the following to Dr. Craig at [mtcraig@umich.edu](mailto:mtcraig@umich.edu) with [IIS] in the subject line.

- Cover letter describing your relevant experiences and publications and preferred start date
- Curriculum vitae
- Names and contact information (title, affiliation, email address, and phone number) of 2-3 referees

The University of Michigan is an equal opportunity employer.