A Systems Approach to Developing Attractive Sustainable Communities - Revitalizing a Rust Belt City Neighborhood

A diverse group of about 10 Cornell faculty and students has been working on modeling various alternative ways of revitalizing parts of Rust Belt cities such as Utica, New York. We are taking a systems view to look at how one would develop an optimum strategy resulting in various kinds and amounts of renewable energy, retrofitting housing for energy efficiency, district heating, improvements to the urban landscape including parks and transportation access, etc. to make a run-down urban area attractive for investment and quality of life. In addition to the engineering and economic issues, this project involves gaining understanding of how people and societies think about the choices that will have to be made and how they decide on the relative overall attractiveness of the possible futures.

We have a possible opening for another person to join the group who has the following characteristics:

- Interests in energy and sustainability
- Some knowledge of Python programming language or a willingness to learn Python quickly
- An interest in systems thinking

Because this is an ongoing team project, a new person on the project will be able to learn a lot and come up to speed rapidly. This could be an MEng project or possibly an undergraduate project. It would probably be for one term but might be expanded into a two-term project.

For further information, please contact Professor Al George, arg2@cornell.edu including a copy of an up to date resume.