Funded PhD Position in Systems Engineering – BlueGreen Decisions Lab, Colorado State University

Position Overview
The BlueGreen Decisions Lab led by Dr. Conrad at Colorado State University, Department of Systems Engineering is recruiting one funded PhD position. Funded for a minimum of three years with a possibility of additional funding, the successful candidate will explore complex human-environmental systems interactions through innovative research methods using social sciences and systems engineering.

Research Focus
The selected candidate will contribute to a vibrant and unique research program that integrates social and engineering sciences to enhance decision-making and visualization. The research will specifically focus on:

1. **Water-Energy Nexus**: Detailed investigation into the system interactions between water and energy utilities within urban systems, focusing on applying systems approaches to enhance efficiency and sustainability.

   **Secondary research opportunities include:**

2. **AI Applications**: Enhancing decision-making processes in the built environment through advanced artificial intelligence techniques.

3. **Human Dimensions**: Applying social sciences to investigate and model the human aspects of engineering and decision sciences to foster sustainable development.

4. **Sustainable Systems Engineering**: Developing solutions based on ecological resilience, nature-based solutions, and community-focused approaches.

Details
The student is required to apply to the Systems Engineering PhD program. They will benefit from the dynamic and collaborative research environment provided by the Energy Institute and CSU powerhouse campus, which provides access to unique field programs and an international network of collaborators.

- **Location**: Colorado State University, Fort Collins, CO
- **Start Date**: Fall 2024 or Spring 2025
- **Application Deadline**: July 1, 2024, for Fall 2024 enrollment, November 1, 2024 for Spring 2025 enrollment

Qualifications
- A Master’s degree in Systems Engineering, Civil and Environmental Engineering, Environmental Science, Electrical Engineering, or a closely related non engineering field with emphasis in human geography, systems science, mixed methods for urban systems and or human dimensions, and or environmental systems management/sustainability.
- Strong analytical and research skills with a keen interest in urban systems optimization, resilience, and sustainable engineering.
- Experience with modeling software, utility systems, and or AI tools is highly desirable.

Application Process
Interested candidates should send a CV, unofficial transcript, and statement of research interests to: Dr. Steven A Conrad (steve.conrad@colostate.edu). Review of applications is ongoing. Upon encouragement from Dr. Conrad, students would apply to the Systems Engineering Department.