Department: Systems Engineering (SIE)
Faculty Supervisor: Garrick Louis
Specialization: Environmental systems

Research Focus: Infrastructure systems for basic human services in rural and low-income communities. Professor Louis conducts case studies in rural villages in developing countries to provide basic services like water, sanitation, and household energy to determine the most effective ways to enable local people to provide sustained access to these services using their local resources.

Job Description: 1) literature reviews and literature searches for related articles on small infrastructure and development; 2) learn and perform GIS mapping of project results; 3) support the senior Capstone design team on their project; 4) attend and participate in graduate and Capstone team research meetings; and 5) support graduate student research as needed.

Required Skills/Knowledge: 1) basic skills in Microsoft Office software and knowledge of Access desirable; 2) ArcGIS or willingness to learn; 3) basic webpage design skills or willingness to learn; 4) good writing skills; and 5) familiarity with Google Earth.

Required Courses: None
Training: None

What You Will Learn: Through this research-work opportunity, you will learn: 1) the status of access to basic human services among people worldwide; 2) effective approaches to addressing these needs; and 3) how individuals can make a difference now and in the future.

Suggested readings: UNDP Human Development Reports; UN Millennium Development Goals Website