

Ph.D. Student Research Assistant – Holistic Sustainable Design (Full-time)

Design of Sustainable Products Across Complex Environments Lab (www.designspacelab.com)

School of Systems & Enterprises, Stevens Institute of Technology

Starting as early as Fall 2021

Position description

Seeking a highly-motivated individual with a background in engineering/mechanical design, sustainability analysis, and/or system modeling, to pursue a Ph.D. in Systems Engineering while supporting a research project on holistic sustainable design. This position is supported by a five-year National Science Foundation grant: https://www.nsf.gov/awardsearch/showAward?AWD_ID=2044853

The Ph.D. Student Research Assistant will be involved in the engineering design and analysis of a medical-grade pump device, as well as life cycle analysis, market systems modeling and analysis, designing and executing human subject experiments, and programming an integrated system model. They will also ideally be involved in education and outreach activities surrounding sustainable design topics. The research assistant will meet weekly with their research advisor, Dr. Steven Hoffenson, to discuss progress and next steps.

Ph.D. students are expected to balance coursework with research activities, where the end goal of the degree program is to learn how to perform rigorous academic research while completing 3-4 impactful, published studies along the way. This process typically takes 3-4 years beyond the master's degree. The position is full-time and includes full tuition coverage and a cost-of-living stipend at the Stevens Institute of Technology's standard rate (approx. \$33,000 per year). The position is located on the Stevens campus in Hoboken, NJ, USA, though much of the research can be performed remotely.

Selection criteria

The student will be selected among the applicants based on the following criteria:

- Interest in relevant topics, particularly sustainable/engineering design, systems modeling and analysis, and academic research;
- Technical skills, such as experience with Excel, CAD/CAE, Python/R programming, life cycle assessment methods, and/or quantitative analysis methods;
- Past academic performance and relevant field of degree(s);
- Attention to detail, as described and evidenced in the application materials; and
- Demonstrated communication skills.

Application instructions

Interested applicants should upload the following materials, combined in a single pdf file, via the online form at <https://forms.gle/B25WU854XLeW8H7GA>:

- Cover letter stating qualifications, interests, career goals, suitability, and availability (e.g., preferred start date) for this position and research project;
- Resume;
- Unofficial transcripts of all undergraduate and graduate work; and
- GRE scores (if available).

Applications will be accepted through **March 19, 2021 at 5:00pm EDT**, after which the selection process will begin. Late applications will be reviewed only if the position has not yet been filled. Please direct any questions about the position to Dr. Steven Hoffenson at shoffens@stevens.edu. The selected candidate will then be directed to apply officially to the Ph.D. program.