

Undergraduate Summer Research Assistant – Design Education

School of Systems & Enterprises, Stevens Institute of Technology

Summer 2020

Position description

Are you interested in contributing to better, more well-rounded engineering education (not just at Stevens, but around the country)? This National Science Foundation-funded project looks into how students think about and learn engineering design. We want to know more about student thinking so that we can improve future engineering education.

Over the past few years, we've collected structured student data from design courses, and a student researcher is needed to help clean and analyze the data, run statistical tests, draw conclusions, and develop recommendations for curriculum updates and future research.

All work will be performed remotely using the research assistant's personal computer. The research assistant will participate in weekly (or more frequent) Zoom meetings with the research team, during which the research assistant will share progress and discuss plans for the upcoming week.

The research assistant will be strongly encouraged to attend the virtual American Society for Engineering Education (ASEE) Annual Conference from June 20-24. Depending on conference scheduling (due to coronavirus-related uncertainty), the student will also be encouraged to attend the American Society of Mechanical Engineers (ASME) IDETC conference in St. Louis from August 17-19. Registration and travel expenses will be covered.

The student will be paid a weekly stipend of \$600 for up to 12 weeks (maximum total stipend \$7,200).

Selection criteria

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

- Expressed interest in relevant topics, particularly engineering education and design;
- Technical skills, such as experience with Excel, Python/R coding, or quantitative analysis;
- Upper-level class standing (more senior students preferred, particularly those who have completed the *Engineering Design VI* course);
- Attention to detail, as described and evidenced in the application materials;
- Demonstrated communication skills;
- Relevant engineering program (Engineering Management, Industrial and Systems Engineering, and Mechanical Engineering preferred, though others will be considered); and
- Expressed interest in pursuing a graduate program.

Application instructions

Interested applicants should email the following materials to Dr. Steven Hoffenson at shoffens@stevens.edu:

- Cover letter stating qualifications, interests, career goals, and suitability for this project;
- Resume; and
- Unofficial transcript.

Applications will be accepted until **Wednesday, April 29th at 5:00pm EDT**, after which the selection process will begin. Late applications will be received only if the position has not yet been filled.