



Student Research Opportunity for Summer 2019

Faculty members from the School of Engineering and School of Humanities & Social Sciences have an exciting opportunity to share with you. We have funding available for qualified students to assist with a National Science Foundation grant during the Summer of 2019. The project involves aspects of research design and human factors psychology principles as well as virtual environments, educational games, simulations, and engineering design and manufacturing. The project focuses on utilizing physical and virtual reality simulations to teach design and manufacturing concepts and understand how engineering students acquire their metacognitive thinking in order to develop professional level skills.

Student Benefits

Student will receive:

- Free summer housing on campus at Behrend
- Stipend in the amount of \$4,800 for the project, where the student is expected to work 40 hours per week for 10 weeks (May 27th to August 9th, not counting the week of July 4th)
- Travel to a national conference with faculty members to present our findings
- Experience working with virtual reality technology and simulations, physiological equipment, and research design
- Opportunity to work on a nationally funded grant

Student Qualifications

We are looking for students who have either of the following skill sets (depending on your background):

Psychology DIGIT (or related majors) students Software Engineering Computer Science (or

who:	related majors) students who:
Have taken statistics (PSYCH200) and research methods (PSYCH301) or who have worked with faculty members on research projects	Have taken game development (GAME250) and intro to programming (CMPSC121)
Have run participants in a study and understand basic research methodologies	Have programming and design experience, especially game related programming
Can assist with coding and data input and have some knowledge of data analysis practices	Willing to learn C# and Unity and comfortable with solving new problems on their own
Have an interest in study design utilizing virtual reality/gaming and eye tracking	Have an interest in programming and designing for virtual reality/gaming

Students applying for this must commit to the summer semester. Students interested in this opportunity should submit a cover letter and resume to Dr. Faisal Aqlan (fua11@psu.edu). There are a limited number of slots and the research faculty will review the applications on a rolling basis so it is important to submit your application as soon as possible to be considered.

If you have any further questions, you can contact Dr. Aqlan <u>fua11@psu.edu</u>, Dr. Lum <u>hcl11@psu.edu</u>, Dr. Zhao <u>ruz14@psu.edu</u>, or Dr. Elliott <u>lje12@psu.edu</u>