PhD positions available in Fall 2021 or Spring 2022

in the area of Virtual Reality/Augmented Reality in Construction Engineering

PhD positions are available immediately in the **Human-Centered Construction (HCC) Lab**, in the Department of Civil, Construction, and Environmental Engineering, **University of Alabama**. to work on research projects to investigate the use of Virtual Reality (VR)/Augmented Reality (AR) for Human-centered construction training and analysis. The expected start date is <u>August 15, 2021</u> or January 15, <u>2022</u>. The student's advisor will be Dr. Yangming Shi. The work will be interdisciplinary by nature, spanning over VR/AR, cognitive science, robotics and automation, and civil engineering.



MINIMUM REQUIREMENTS:

Previous degrees in Civil Engineering, Construction Engineering/Management, Computer Science, Industrial and System Engineering, Mechanical Engineering, Electrical Engineering, or related fields. Other general requirements for PhD admission please refer to:

http://cce.eng.ua.edu/graduate

DESIRABLE QUALIFICATIONS:

Interests and experiences related to:

- 1) Virtual Reality (Unity game engine)
- 2) Human Computer Interaction
- 3) Human Factor Engineering

ASSISTANTSHIP PACKAGE:

Competitive stipend, full tuition waiver, and healthcare. Room & board expenses will be covered for research travels (conferences, data collections).

RESPONSIBILITIES:

To work on research projects to study Human-Centered Visualization in Construction. Specific responsibilities include:

- To work with other PhD students on VR model developments (Unity development; Python, R, JAVA, C#, MATLAB preferred).
- To lead a user requirement study about the emerging visualization technology needs in construction.
- To assist the data analysis.
- To lead and participate in disseminating the results via publications.

APPLICATION INSTRUCTION:

Please send your CV and a short research statement to Dr. Yangming Shi at shiyangming@gmail.com.

CONTACT:

Yangming Shi, Ph.D. Assistant Professor Department of Civil, Construction, Environmental Engineering College of Engineering University of Alabama



Established in 1820 and opened to students in 1831, the University of Alabama is the oldest and largest of the public universities in Alabama as well as the flagship of the University of Alabama System. The university is classified as a Research University with Very High Research by the Carnegie Foundation. U.S. News & World Report unveiled its 2015 Best Colleges rankings and ranked Alabama in a tie as the nation's 88th best college in national universities.