

## 2019 Summer Research Experience Opportunity

### Applied Cognitive Psychology (ACP) lab

[www.jfenglab.com](http://www.jfenglab.com)

### Human Factors and Applied Cognition Program North Carolina State University

[North Carolina State University](http://www.ncsu.edu) is a R1 public research university in Raleigh, North Carolina. It is part of the University of North Carolina system and is among the largest universities in the US. NC State and Zhejiang University shares global strategic partnership on education and research. The [Human Factors and Applied Cognition Program](#) in the Department of Psychology at NC State applies fundamental and applied research to the solution of practical problems.

#### ACP Lab

The Applied Cognitive Psychology (ACP) Lab is devoted to studying human attention and cognition, with applications of cognitive principles to human factors in transportation and display design. We are interested in how attentional functions operate, how we can improve these functions, and how to design interfaces that best suit our attentional and cognitive abilities. Guided by a theory-practice model, our empirical research focus is twofold: (1) to examine fundamental theoretical questions on spatial, selective, and sustained attention that grow from hypotheses about real-world problems in driving and interface design; (2) to apply the understanding of cognitive and neural mechanisms of attention to practical problems such as aging and driving, driver distraction, driver-automation interaction, and information visualization. Our areas of research include:

- Spatial, selective, and sustained attention
- Age-related changes in attention, driving safety, and brain plasticity
- Driver distraction, mind wandering, driver-automation interaction
- Information displays to facilitate attentional processing

Dr. Jing Feng is the director of the ACP Lab. She completed her undergraduate study at Zhejiang University in China, and received her M.A. and Ph.D. degrees in Cognitive Psychology at the University of Toronto in Canada. Prior to joining NC State, she received postdoctoral training at the Rotman Research Institute at Baycrest on cognitive neuroscience of aging, and at the Department of Mechanical and Industrial Engineering, University of Toronto, on human factors in driving. She is an Assistant Professor at the Department of Psychology, a faculty affiliate at the Department of Industrial and Systems Engineering and the Institute of Transportation Research and Education, and a university faculty scholar at North Carolina State University.

**[Program Duration]:** July 7<sup>th</sup> to August 7<sup>th</sup>, 2019

**[Research Experience Description]:** The ACP Lab offers this opportunity through the [Global Engagement in Academic Research \(GEAR\) program](#) at North Carolina State University. Students enrolled in the program and hosted by the ACP Lab will be involved in research activities including literature review, study preparation, data collection and analysis, and are expected to present their research products in a poster at the NC State Undergraduate Research Symposium as required by the GEAR program.

**[Number of openings]:** 2

**[Applicants Qualifications]:** Students with outstanding academic records and strong interests in human attention and transportation human factors. Programming skills are desired but not required.

**[Application instruction]:** Please follow the application procedure of NC State's [GEAR program](#). The point of contact for this program at Zhejiang University is Yuwen Yang ([yuwen@zju.edu.cn](mailto:yuwen@zju.edu.cn)). Should you have any question regarding the research activities, please contact Dr. Jing Feng ([jing\\_feng@ncsu.edu](mailto:jing_feng@ncsu.edu)).