

Sabbatical leave report

During the fall semester of 2017 I was fortunate enough to receive a sabbatical. The primary purpose of the proposed project was to improve my existing research capabilities by integrating eye tracking technology with psychophysiological measures. During the sabbatical, I completed the necessary training to integrate physiological recording, eye tracking using an automated camera-based system and stimulus presentation software. I undertook computer programming lessons using Lynda.com and relied on videos, discussion boards and tech support to learn how to integrate the physiology equipment and software with the eye tracking and stimulus presentation software. I was then able to use Matlab to measure the average brightness and contrast of a set of images. This allowed me to control for brightness and contrast, two low-level features that can influence visual attention. By the end of the sabbatical, I had all the programming and hardware integration needed to build an experiment. I then proceeded to build the experiment so that when I resumed teaching in Spring, I was able to supervise a group of undergraduate students as they learned the theory as well as how to use the technology for data collection. We were able to successfully collect data on approximately 100 participants in the spring. The students presented the study at the annual Sage Research Conference.