SAFER-SIM invites you to participate in a Simulation Boot Camp



Simulation Boot Camp is a webinar series on using simulation technology to study transportation problems. Participation is open to individuals in academia, government, and industry who are interested in learning about how to use simulation technology in their research. This workshop will cover topics such as simulation hardware and software, scenario development, best practices for testing participants using simulation technology, and simulation data reduction and analysis. The sessions are designed to be interconnected so attending all is suggested.

Register here https://safersim.wufoo.com/forms/simulation-boot-camp/

Simulation Boot Camp Webinar 1 - Overview of Simulation

Tuesday, April 2

4:00 -5:30 PM Eastern (3:00-4:30 PM Central)

The first session is an overview of simulation as a tool and touches on why and when to use simulation, review of simulators, display systems, game engines as simulation engines, sensor systems, motion tracking, eye-tracking, biometric systems, and distributed simulation.

Simulation Boot Camp Webinar 2 - Experimental Design

Tuesday, April 9

4:00 -5:30 PM Eastern (3:00-4:30 PM Central)

The second session covers what are good research questions for simulation, designing an experiment, independent variables, dependent variables, controls and counter measures, order effects, samples and generalizability, identifying problems early, and how your experimental design informs how your scenarios are designed.

Simulation Boot Camp Webinar 3 – Scenario Design, Development, and Testing

Tuesday, April 16

4:00 -5:30 PM Eastern (3:00-4:30 PM Central)

Moving from your experimental design into developing your scenarios is covered in the third session. Picking up where the previous session left off, we begin with how your experimental design leads to scenario specifications, how many scenarios you will need, authoring your events to get the data you are interested in, and how the cyclical process of authoring and verifying leads into the procedures you will use in data collection.

Simulation Boot Camp Webinar 4 - Conducting Simulator Studies

Tuesday, April 23

4:00 -5:30 PM Eastern (3:00-4:30 PM Central)

Session 4 moves from technical development into data collection covering Institutional Review Board approval, developing experimental procedures, participant recruitment and getting the right sample, what is informed consent, experimenter affects, assigning experimental conditions, documentation and record keeping, and confirmation the data you collect is protocol correct.

Simulation Boot Camp Webinar 5 - Data Analysis

Tuesday, April 30

4:00 -5:30 PM Eastern (3:00-4:30 PM Central)

In the final session activities that follow data collection are covered, such as data wrangling, visualization, reduction, analysis and modeling, reproducible research and provides resources.

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If you have any questions, please contact Dawn Marshall at <u>dawn-marshall@uiowa.edu</u> or 319-335-4774.