

## **Researcher, Research assistant, or UROP positions, 2016-2017**

### **Developing a management simulation game on building cybersecurity capabilities**

Cybersecurity is rapidly becoming a critical issue for any organization. In the business context, it is highly challenging for managers to allocate their resources to invest in cybersecurity capabilities development. In an attempt to help managers experience such complexities, we have designed a management simulation game (so called a 'flight simulator'). The game is based on our system dynamics simulation model and runs online in an interactive environment. However, it is in initial versions and has much room for improvement.

You will be involved in improving the game—particularly enhancing and validating its mechanisms—by reviewing the literature and conducting informal interviews with experts. You can also contribute in conducting experiments using the game to analyze players' behavior. This project can enhance your critical thinking, simulation modeling, and data analysis skills.

Required skills include attention to details, as well as excellent reading, writing, and communication skills. Familiarity with cybersecurity and system dynamics or other simulation modeling techniques is a plus but not required. We are particularly interested in working with motivated and organized students who are committed to doing research.

Selected candidate(s) can join the project immediately. You will be working with the MIT (IC)<sup>3</sup> (<http://ic3.mit.edu>) at the Sloan School of Management, working with Stuart Madnick, Michael Siegel, and Mohammad Jalali. This is preferably a position for a masters' thesis but other possibilities can be considered.

Please email Mohammad Jalali ([jalali@mit.edu](mailto:jalali@mit.edu)) with your CV, and feel free to ask if you have any questions.