Modeling and Simulation in Medicine

The past decade has brought about a dramatic increase in the deployment of simulation-based techniques in medicine and its related healthcare fields. Simulation scenarios are used extensively for training of medical personnel, students, first responders, and emergency response coordinators. Rapid advances in computer technologies, biomedical engineering, and systems engineering drive the development of cyber physical systems that serve as simulation based training platforms. However, it is clear that methodological and theoretical foundations need to be strengthened to provide integrated, connected, and cross-cutting solutions for modeling and simulation in healthcare. Thus, this meeting will attempt to “connect” researchers, developers, and medical practitioners in an attempt to define unifying themes for such solutions.

Topics

The conference will focus on (but is not limited to) the following topical areas:

- Modeling and simulation in medicine: fundamental research
- Training and education
- Care delivery, outcomes, and patient’s safety
- Robotics and its applications in training and “in vivo”
- Life-critical systems
- Systems integration: “connected health"

Papers are solicited to address the above and related areas with focus on both the underlying methodological and theoretical foundations and practical applications.

Submission Guidelines

Contributed papers are 8-10 pages long. They will be peer reviewed and – if accepted and presented at the conference - submitted to the ACM Digital Library.

Posters will be peer reviewed and feedback will be provided. If accepted, they will be presented in the poster session of SpringSim’15. Poster authors are encouraged to submit a one page summary for inclusion in the proceedings, but they will not be submitted to an indexed archive.