

SPRINGSIM'20

2020 Spring Simulation Conference

AIMS AND SCOPE

For the **M&S for Smart Energy Systems (MSSES) Track**, smart energy systems, which integrate sensing, communication, and control to more efficiently produce, transmit, and use electrical power, have the potential to radically transform our economy. At the same time, smart energy systems are necessarily complex software systems that will monitor and regulate all aspects of the electrical power infrastructure. Modeling and simulation will play an indispensable role in making these systems affordable because the scale and cost of experimentation with live equipment is prohibitive. This track invites papers documenting novel uses of modeling and simulation to create and operate energy systems that improve the reliability, efficiency, environmental impact, and other aspects of energy generation, deliver, and end use by fusing sensing, communication, and control. Topics of interest include, but are not limited to novel applications of modeling and simulation to explore and understand technology for:

- Using of small, distributed electrical loads to provide ancillary services
- Achieving high levels of renewable energy generations
- Micro-grids
- Smart buildings
- Power flow control
- Advanced batteries
- Energy efficiency
- New or more efficient forms of power generation