Dr. Mark Blackburn’s research addresses model based verification and validation and behavioral generation for complex adaptive systems, risk-informed decision making, Bayesian networks for prediction, estimation, decision making and visualization, and modeling and simulation in the research domains of national security and sustainable energy.

Currently Funded Projects:

- FAA NextGen Project: Analysis Modeling Framework for Allocation of Capabilities across Enterprise Levels where Implementation is Asynchronous, Federal Aviation Administration
- IEEE Smart Grid Vision Project - Development of a vision for the Smart Grid from a computing perspective looking forward 30 years into the future, Pro bono
- MRI: Acquisition of a Large Volume, Real-time, High Resolution, and Motion Capture System for an Interdisciplinary Research Facility, National Science Foundation

Proposals to be Submitted for Funding:

- Adaptive Robotic Environment – National, Science Foundation, Air Force Office of Scientific Research, or Office of Naval Research
- A Framework for Expedited Systems Development: Extension of RT-34 to include a modeling and analysis framework for risk-informed decision making of expedited systems – SERC, or related sponsors