



GDRR Program Opening Workshop August 5-9, 2019 SCHEDULE

Monday, August 5th

SAS Hall Auditorium, North Carolina State University

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| 8:30 | Registration |
| 8:50-9:00 | David Banks , SAMSI / Duke University
Welcome

National Security and Safety |
| 9:00-9:35 | Eunshin Byon , University of Michigan
<i>"Variance Reduction for Reliability Assessment with Stochastic Computer Models"</i> |
| 9:35-10:10 | Daniel A. Eisenberg , Center for Infrastructure Defense Naval Postgraduate School
<i>"Rethinking Resilience Analytics"</i> |
| 10:10-10:45 | Igor Linkov , US Army Corp of Engineers
<i>"Resilience: State of Science and State of Applications"</i> |
| 10:45-11:15 | Break |
| 11:15-11:50 | Patricia Hu , U.S. Department of Transportation
<i>"Transportation System Reliability: Challenges and Opportunities"</i> |
| 11:50-12:25 | Evans Gouno , Universit'e de Bretagne Sud
<i>"Bayesian Inference for Common Cause Failure Rate Based on Causal Inference with Missing Data"</i> |
| 12:25-2:00 | Lunch on your Own |
| 2:00-2:35 | Jun Zhuang , University of Buffalo
<i>"Game Theory and National Security"</i> |
| 2:35-3:10 | Robert Sivinski , US Office of Management & Budget
<i>"The Foundations for Evidence Based Policymaking"</i> |
| 3:10-3:40 | Break |
| 3:40-5:20 | Panel Discussion <ul style="list-style-type: none">• Seth Guikema, University of Michigan• James Lambert, University of Virginia
<i>"Disrupting Priorities of Engineering Systems"</i>• Alyson Wilson, N.C. State University• Simon Wilson, Trinity College |
| 5:30-7:00 | Posters and Reception |

Tuesday August 6th

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Risk and Decisions in Societal Systems and Policy Advisory Contexts

- 9:00-9:35 **Alicia Carriquiry**, Iowa State University
“Risk and Decisions in the Criminal Justice System”
- 9:35-10:10 **Weidong Tian**, UNC-Charlotte
“Dynamic Financial Decisions under Financial Risks”
- 10:10-10:45 **Tao Pang**, N.C. State University
“Portfolio Optimization with Conditional Value-at-Risk”
- 10:45-11:15 Break
- 11:15-11:50 **Nalini Ravishanker**, University of Connecticut
“Modeling Approaches for High-Frequency Financial Time Series”
- 11:50-12:25 **George Michailidis**, University of Florida
“Network Connectivity and Implications for Systemic Risk”
- 12:25-2:00 Lunch on your Own
- 2:00-2:35 **Tahir Ekin**, Texas State University
“Fraud Analytics”
- 2:35-3:10 **Sujit Ghosh**, N.C. State University
“When are PH, AFT and PO Models not Adequate for Health Risk Assessment?”
- 3:10-3:40 Break
- 3:40-5:20 Panel Discussion
- **Jennifer Clarke**, University of Nebraska-Lincoln
 - **Gordon Milbourn III**, The MITRE Corporation
 - **Sanjib Basu**, University of Illinois, Chicago
- 6:00 NC ASA Social Event: **Raleigh Beer Garden**, 614 Glenwood Ave, Raleigh, NC 27603

Wednesday August 7th

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Connections between the Two Focus Areas

- 9:00-9:35 **David Banks**, SAMSI / Duke University
- 9:35-10:10 **Jesus Rios**, IBM Research AI
“Adversarial Risk Analysis”
- 10:10-10:45 **Joseph Halpern**, Cornell University
“Computer Science Meets Game Theory: Implementing Mediators Robustly”
- 10:45-11:15 Break

- 11:15-11:50 **Feng Liang**, University of Illinois
“Bayesian Regularization: Asymptotic Properties and Computation”
- 11:50-12:25 **Bo Li**, University of Illinois
“Gradient Boosting Trees for Spatial Data Prediction”
- 12:25-2:00 Lunch on your Own
- 2:00-2:35 **Nicholas Polson**, University of Chicago
“Deep Reinforcement Learning for Asset Based Modeling”
- 2:35-3:10 **Andrew Belmonte**, Penn State University
“Evolutionary Games and Adversarial Systems - Fundamentals and New Directions”
- 3:10-3:40 Break
- 3:40-5:20 Panel Discussion
- **Melike Baykal-Gursoy**, Rutgers University
 - **Bowei Xi**, Purdue University
“A Game Theoretic Approach for Adversarial Machine Learning – When Big Data Meets Cybersecurity”
 - **Nozer Singpurwalla**, City University of Hong Kong
 - **Vicky Bier**, University of Wisconsin

Thursday August 8th

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- 9:00-10:00 Formation of Working Groups
- 10:00-5:30 Working Groups Meet in Breakout Rooms in SAS Hall

Friday August 9th

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- 9:00 -10:30 Working Group Leaders Describe Research Plans
- 10:30-11:00 Break
- 11:00-11:45 Working Group Leaders Describe Research Plans
- 11:45-12:00 Closing Remarks
- 12:15 Shuttle to RDU Airport