Call for Papers

5th Annual **HOT TOPICS** *in the* **SCIENCE OF SECURITY** ***(HoTSoS)***

APRIL 10-11, 2018 | RALEIGH, NORTH CAROLINA

https://hotsos.org

Overview

Submissions are solicited for the 5th Annual Hot Topics in the Science of Security (HoTSoS) Symposium, which will be held April 10-11, 2018 at the StateView Hotel in Raleigh, North Carolina on the Centennial Campus of North Carolina State University. The symposium will include a mix of invited talks, refereed papers, panels, tutorials, and posters. As in prior years, papers will appear in the conference proceedings to be published by ACM Press.

Scope, Goals & Vision

HoTSoS draws together researchers, practitioners, and thought leaders from government, industry, and academia. The conference provides a forum for dialogue centered upon the development and advancement of scientific foundations in cybersecurity. The technical emphasis of HoTSoS is on scientific methods, data gathering and analysis, experimental approaches, mathematical models, and the interactions among those approaches to build a foundational science of security. The HoTSoS vision is one of engaging and growing a community—including researchers and skilled practitioners from diverse disciplines—that is focused around the advancement of scientific methods.

Topics of Interest

We invite submissions on any topic related to science of security that aligns with the conference scope and goals listed above. The 2018 HoTSoS will highlight the following themes:

- **Scalability and composability** in the construction of secure systems,
- **Policy-governed collaboration** for handling data across different domains of authority while ensuring security and privacy,
- **Security metrics** to guide choice-making in security engineering and response,
- **Resilient architectures** that can deliver service despite compromised components,
- Analysis of **human behavior**, including modeling users, operators, and adversaries, to support improved design and analysis,
- Foundational research related to **privacy** that allows for the ability to use (i.e., collect, store, and share) data in accordance with requirements, and
- Foundations for the security of **cyber-physical systems**, including applications to the Internet of Things.

Important Dates

Full Paper/Tutorial/Talk Submissions:	January 17, 2018 (firm)
Poster Submissions:	February 23, 2018
Full Paper/Tutorial/Talk Decisions:	February 16, 2018
Camera Ready:	February 28, 2018
Conference:	April 10-11, 2018

Submission Requirements

Full paper/tutorial/talk submission deadline. Submissions of full papers, tutorial proposals, or government/industrial talk proposals must be made by the deadline of Wednesday, January 17, 2018 (anywhere on Earth) (firm) through https://easychair.org/conferences/?conf=hotsos2018 by specifying the submission category to be one of the following.

Full Papers. A submission of full paper should be at most 10 pages in the double-column ACM format* including the bibliography or, alternatively, 9 pages not including the bibliography. The paper may have optional appendices, but reviewers are not required to read them. All submissions must be in PDF format.

Tutorial proposals. A submission of tutorial proposal should be at most 5 pages in the double-column ACM format* including the bibliography. A submission should include a detailed syllabus of material to be presented. All submissions must be in PDF format.

Government/industrial talk proposals. If you are from the government or industrial sector and are interested in giving a talk, please submit your abstract of your talk abstract, at most 1 page in the double-column ACM format* including the bibliography.

Posters. If you are interested in participating in the poster session, please upload a submission of your poster abstract by the deadline of Friday February 23, 2018 (anywhere on Earth) through https://cps-vo.org/hotsos18/poster-cfp. Each abstract submission should be at most 1 page following the double-column ACM format* including the bibliography.

Simultaneity. Submissions must not have been published previously, and may not be submitted in parallel to any other journal or conference/workshop with published proceedings. The program chairs reserve the right to consult confidentially with other chairs and responsible parties if a double submission is suspected.

***ACM format:**

http://www.acm.org/sigs/publications/proceedings-templates

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HOTSOS 2018

General Co-Chairs



MUNINDAR SINGH is a full professor in the department of computer science at North Carolina State University. Munindar's research interests include multi-agent systems and service-oriented computing, wherein he addresses the challenges of trust, service discovery, and business processes and protocols in large-scale open environments. Munindar is a co-director of the NCSU Science of Security Lablet.



LAURIE WILLIAMS is the Interim Department Head of Computer Science and a Professor in the Computer Science Department of the College of Engineering at North Carolina State University (NCSU). Laurie is a co-director of the NCSU Science of Security Lablet. Laurie's research focuses on software security particularly in relation to healthcare IT; agile software development practices and processes, particularly continuous deployment; and software reliability, software testing and analysis.

Program Co-Chairs



RICK KUHN is a computer scientist in the Computer Security Division of the National Institute of Standards and Technology. He has authored two books and more than 100 conference or journal publications on information security, empirical studies of software failure, and software assurance, and is a senior member of the Institute of Electrical and Electronics Engineers (IEEE). He co-developed the role based access control model (RBAC) used throughout industry and led the effort that established RBAC as an ANSI standard. Previously he served as Program Manager for the Committee on Applications and Technology of the President's Information Infrastructure Task Force and as manager of the Software Quality Group at NIST.



TAO XIE is a Professor and Willett Faculty Scholar in the Department of Computer Science at the University of Illinois at Urbana-Champaign, USA. He worked as a visiting researcher at Microsoft Research. His research interests are in software engineering, focusing on software testing, program analysis, software analytics, software security, and educational software engineering. He received a 2016 Microsoft Research Outstanding Collaborators Award, a 2014 Google Faculty Research Award, 2008, 2009, and 2010 IBM Faculty Awards. He is an ACM Distinguished Speaker and an IEEE Computer Society Distinguished Visitor. He is an ACM Distinguished Scientist. His homepage is at http://taoxie.cs.illinois.edu.

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