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Volume 310

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National Cyber Summit (NCS) Research Track 2021

Springer

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Preface

While governments around the world have focused on strengthening their cybersecurity posture in recent years, cybersecurity remains a topic of ongoing importance. For example, in the “Executive Order on Improving the Nation’s Cybersecurity (May 12, 2021)[1], it was reported that:

> *The United States faces persistent and increasingly sophisticated malicious cyber campaigns that threaten the public sector, the private sector, and ultimately the American people’s security and privacy. The Federal Government must improve its efforts to identify, deter, protect against, detect, and respond to these actions and actors. The Federal Government must also carefully examine what occurred during any major cyber incident and apply lessons learned. But cybersecurity requires more than government action. Protecting our Nation from malicious cyber actors requires the Federal Government to partner with the private sector. The private sector must adapt to the continuously changing threat environment, ensure its products are built and operate securely, and partner with the Federal Government to foster a more secure cyberspace. In the end, the trust we place in our digital infrastructure should be proportional to how trustworthy and transparent that infrastructure is, and to the consequences we will incur if that trust is misplaced.*

As we have noted in the past years, there is a continuing need to keep a watchful brief on the cyber threat landscape, and this is the intention of this conference proceedings.

This conference proceedings contains a total of 13 papers consisting of both regular and invited papers from the 2021 National Cyber Summit Research Track. The 2021 National Cyber Summit was originally planned to be held in Huntsville, Alabama, from June 8 to 10, 2021. However, due to the COVID-19 pandemic, all tracks of the 2021 National Cyber Summit were delayed until September of 2021. The 2021 National Cyber Summit Research Track was held in-person from September 28 to 30. Authors from each selected paper presented their work and took questions from the audience.

[1] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/.

The papers were selected from submissions from universities, national laboratories, and the private sector from across the USA. All of the papers went through an extensive review process by internationally recognized experts in cyber-security.

The Research Track at the 2021 National Cyber Summit has been made possible by the joint effort of a large number of individuals and organizations worldwide. There is a long list of people who volunteered their time and energy to put together the conference and deserved special thanks. First and foremost, we would like to offer our gratitude to the entire Organizing Committee for guiding the entire process of the conference. We are also deeply grateful to all the Program Committee members for their time and efforts in reading, commenting, debating, and finally selecting the papers. We also thank all the external reviewers for assisting the Program Committee in their particular areas of expertise as well as all the authors, participants, and session chairs for their valuable contributions.

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