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Computer Network Security

6th International Conference on Mathematical Methods, Models and Architectures for Computer Network Security, MMM-ACNS 2012 St. Petersburg, Russia, October 17-19, 2012 Proceedings



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Preface

This volume contains papers presented at the 6th International Conference on Mathematical Methods, Models and Architectures for Computer Network Security (MMM-ACNS 2012) held in St. Petersburg, Russia, during October 17–19, 2012. The conference was organized by the St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences (SPIIRAS) in cooperation with Binghamton University (SUNY).

The previous international conferences "Mathematical Methods, Models and Architectures for Computer Networks Security" (MMM-ACNS 2001, MMM-ACNS 2003, MMM-ACNS 2005, MMM-ACNS 2007, and MMM-ACNS 2010), organized by SPIIRAS and Binghamton University (SUNY) and supported by the European Office of Aerospace Research and Development USAF, the US Office of Naval Research Global, and the Russian Foundation for Basic Research, were successful. These conferences demonstrated the high interest of the international scientific community in the theoretical and practical aspects of computer network security.

MMM-ACNS 2012 provided the next international forum for sharing original research results among specialists in fundamental and applied problems of computer network security. A total of 44 papers from 12 countries were submitted to MMM-ACNS 2012. Fourteen papers were selected as regular and 8 as short presentations (32% of acceptance for full papers).

Seven technical sessions were organized, namely: applied cryptography and security protocols; access control and information protection; security policies; security event and information management; intrusion prevention, detection, and response; anti-malware techniques; and security modeling and cloud security. The MMM-ACNS 2012 program was enriched by invited papers presented by four distinguished invited speakers: Ben Livshits (Microsoft Research and University of Washington, USA), Fabio Martinelli (Institute of Informatics and Telematics, National Research Council, Italy), Angelos Stavrou (Mason University, USA), and Bhavani Thuraisingham (University of Texas at Dallas, USA).

The success of the conference was assured by the team effort of sponsors, organizers, reviewers, and participants. We would like to acknowledge the contribution of the individual Program Committee members and thank the paper reviewers.

Our sincere gratitude goes to the participants of the conference and all authors of the submitted papers. We are grateful to our sponsors: European Office of Aerospace Research and Development (EOARD) of the US Air Force and the US Office of Naval Research Global (ONRGlobal).

We wish to express our gratitude to Springer's LNCS team managed by Alfred Hofmann for their help and cooperation.

October 2012 Igor Kotenko Victor Skormin

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