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ACM CCS 2014 General Chair's Welcome

As the general chair, I would like to extend to you all a warm welcome to the *21st ACM Conference on Computer and Communications Security* (CCS 2014). This year's CCS event continues its tradition of being the premier forum for presentation of research results and experience reports on leading edge issues in the field of computer security. The mission of CCS is to bring together information security researchers, practitioners, developers, and users from all over the world to explore cutting-edge ideas and results. It provides an environment to conduct intellectual discussions. From its inception, CCS has established itself as a high standard research conference in its area.

Once again we have a very strong technical program, with 12 technical sessions and 3 tutorials along with 10 specialized pre- and post-conference workshops and 41 posters/demos. We are also fortunate to have distinguished invited speakers who will provide various insights into security research opportunity in next-generation Internet and new aspects of privacy. These valuable and insightful talks can and will guide us to a better understanding of the future. In addition, we have a poster/demo session on both fundamental and emerging topic areas in the field of computer security.

Putting together *CCS 2014* was a team effort. We first thank the authors for providing the content of the program. We are grateful to the program co-chairs, Moti Yung and Ninghui Li, and the program committee, who worked very hard in reviewing papers and providing feedback for authors, as well as the organizing committee for their hard work that has continued to uphold the high standard that is now a custom to this conference series. We also appreciate the effort of the steering committee chair, Somesh Jha and the chair of our sponsor ACM SIGSAC, Trent Jaeger. We also thank the staff of the ACM and SEFCOM research group at Arizona State University (ASU) for assisting us throughout the organization and publication process, and the School of Computing, Informatics and Decision Systems Engineering at ASU for their generous support.

Finally, we thank our sponsor, ACM SIGSAC, and our generous corporate supporters, Arizona State University, National Science Foundation, US Army Research Office, SAP, HP, CISCO, Google, CAaNES, Microsoft Research, IBM Research, ETRI, BOSCH, and Chungbuk National University.

We hope that you will find this program interesting and thought-provoking and that the *CCS 2014* will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world. Also, we hope you all enjoy your visit to Arizona!

Gail-Joon Ahn
ACM CCS '14 General Chair
Arizona State University, USA

CCS 2014 Program Chairs' Welcome

We are pleased to present herein the proceedings of the 2014 ACM Conference on Computer and Communications Security (CCS 2014), held in Scottsdale, Arizona, USA, November 3-7, 2014.

We received 585 submissions (not including some initial withdrawals) from 43 countries. This is the largest number of submissions received to date by a computer security conference. A Program Committee comprising 98 experts from 15 countries, helped by 399 external reviewers, evaluated these submissions employing the customary double-blind review procedure. The review process resulted in 114 papers being accepted to the program, representing an acceptance rate of about 19.5% and providing a very broad coverage of the entire information security area.

The review process was organized in three phases. After a first review phase, the authors of each paper were sent at least two preliminary reviews (the majority of papers, in fact, got three reviews). Authors were given an opportunity to respond to the comments received. During the second phase, reviews were updated as necessary, and in some cases additional reviews were solicited. At the end of the second phase, 542 papers received at least three reviews, 36 received four, and 5 received five. The first and third phases included comprehensive discussions, and after an intensive final debate, the acceptance decisions were made.

As is typically the case with very competitive conferences, many of the papers that could not be included in the program contain interesting ideas and often present new research results worth reporting on to the security community. For these reasons, we encouraged authors of some papers to consider submitting their work to the specialized workshops associated with CCS. Other high quality works that could not be accepted, will surely appear in other leading forums after suitable improvements. We hope that most authors benefitted from the feedback received from the CCS reviewers, and that the review process has helped them improve their papers (while we are also aware that due to the short reviewing time, at a conference of CCS scale it is unavoidable that a handful of reviews may be possibly lacking in some respect).

We are very grateful to the members of the Program Committee for their very hard work, professionalism, and responsiveness under very tight deadline requirements. On average, each individual reviewed 18 papers, and nearly a third of the members volunteered to help shepherd accepted papers toward improved presentations. Most members engaged in lively discussions on, both, submissions and author responses, and updated their reviews to reflect valuable insights derived from those discussions. We are also indebted to the external reviewers whose focused expertise added substantial value to the feedback for authors. Moreover, we want to thank the CCS 2014 conference committee: the general chair, workshop/ poster/ tutorial co-chairs, and other chairs and organizers, as well as the steering committee, for numerous discussions on how to produce an exceptional program and for their hard work on the production of these proceedings.

Lastly, we thank the authors of all submitted papers, and all attendees for their participation in the technical discussion during the conference. We hope that you find the program stimulating, enjoyable, and helpful in advancing the exciting area of computer and communication security.

Moti Yung
ACM CCS'14 Program Co- Chair
Google and Columbia University, USA

Ninghui Li
ACM CCS'14 Program Co-Chair
Purdue University, USA

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The 22nd ACM Conference on Computer and Communications Security will be held in the city of Denver, Colorado from October 12, 2015 to October 16, 2015. Known as the Mile-High City, Denver is the 3rd "greenest" city, and one of the top 10 safest large cities in the U.S. The nearby Rocky Mountains offer a wealth of opportunities for outdoor adventures, including hiking, mountain biking, rock climbing, white water rafting and, during winter, skiing and snow shoeing. **Conference Location**: The conference will be held at the Denver Marriott City Center located in the heart of downtown Denver, surrounded by dining and shopping options and one block away from Denver's famous 16th Street Mall. The hotel is easily accessible from I-25 and a short 30-minute ride from Denver International Airport (DEN), which offers non-stop flights to most major cities in the U.S. as well as to major cities in Europe and worldwide.

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The conference seeks submissions from academia, government, and industry presenting novel research results in all practical and theoretical aspects of computer and communications security. Papers should be related to the construction, evaluation, application, or operation of secure systems. Theoretical papers must make a convincing argument for the relevance of the results to secure systems. All topic areas related to computer and communications security are of interest and in scope. ACM Press will publish accepted papers in the conference proceedings. Further concrete instructions and submissions rules and regulations will be published in the Call for Papers, which will be accessible via the conference web page **http://www.sigsac.org/ccs/CCS2015**.

Submissions must be made by the deadline of Friday, May 15, 2015 23:59 (UTC-11). The review process will be carried out in two phases and authors will have an opportunity to comment on the first-phase reviews. Submitted papers must not substantially overlap papers that have been published or that are simultaneously submitted to a journal, conference or workshop. Simultaneous submission of the same work is not allowed. Note that submitted papers cannot be withdrawn from the process after authors receive the first phase reviews. Authors of accepted papers must guarantee that their papers will be presented at the conference.

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Proposals are solicited for workshops to be held in conjunction with ACM CCS 2015. Each workshop provides a forum to address a specific topic at the forefront of security research. A workshop associated with CCS must be one full day in length. Proceedings of all such workshops will be available (on a USB jump drive) to the workshop attendees. Each workshop will also have on-line proceedings through ACM Digital Library, with a separate ISBN. Guidelines for workshop proposal submission will be available from **http://www.sigsac.org/ccs/CCS2015**.

Important Dates:

CCS Paper Submission	May 15, 2015 23:59 (UTC – 11)
CCS Author Notification	July 22, 2015
Workshop Proposals	March 18, 2015 23:59 (UTC -11)
Workshop Paper Due	(around) June 8, 2015
Workshop Notification	July 19, 2015
Camera Ready Due	July 29 (Workshops) / August 9, 2015 (CCS)
CCS 2015	**October 12 – 16, 2015**

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