Proceedings New Security Paradigms Workshop 2005

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Greetings from the New Security Paradigms Workshop 2005 General and Vice Chairs

The New Security Paradigms Workshop (NSPW) is a workshop that is devoted to the critical examination of new paradigms in security. Our program committee particularly looks for new paradigms, innovative approaches to older problems, early thinking on new topics, and controversial issues. This year's workshop was held at the UCLA Conference Center on scenic Lake Arrowhead in the San Bernardino Mountains, Southern California, USA. This volume contains the papers that were presented at the 2005 workshop. Further information about the workshop can be found on the workshop home page at *http://www.nspw.org*.

The workshop is distinguished by the fact that every selected paper is discussed in a collegial setting. Authors are instructed to prepare a 15 minute presentation and are then given one hour of actual presentation-and-discussion time. This, along with our 'social contract' (prior agreement by delegates to attend every workshop session), results in a constructive and highly interactive workshop. Authors typically receive considerable feedback on their presentation and incorporate it into the final version of their paper contained in this proceedings.

Many people were involved in the organization of this workshop. Program chairs John McHugh and Bob Blakely, along with their program committee, have earned our sincere thanks for their contribution towards putting together an excellent program and proceedings. Bob Blakley and Carrie Gates once again performed as our scribes, taking notes during the discussions and providing the presenters with complete notes after each presentation. We are grateful to Local Chair Karl Levitt and his assistant Tammy Gee for working with the UCLA Conference Center to help ensure that the workshop was a success. Thanks goes also to the Publications Chair, Victor Raskin, who has tirelessly worked behind the scenes making sure that the production of the proceedings goes off without a hitch. Finally, we are grateful to the authors, panelists and attendees who really make this workshop an enjoyable and fruitful event.

NSPW is sponsored by the Applied Computer Security Associates (ACSA), and our thanks to them, and especially to Marshall Abrams and Jeremy Epstein, for their unstinting assistance and constant support. Financial Aid chair Steven J. Greenwald organized the collection and disbursement of financial aid to help make it possible for students and others with limited funding to attend. Our financial aid provider, the U.S. Department of Defense, continued their tradition of supporting graduate student work in computer security. We are also grateful to James Madison University for managing the disbursement of scholarship monies to students.

Simon Foley (*s.foley@cs.ucc.ie*), General Chair
Abe Singer, (*abe@sdsc.edu*) Vice Chair

A Note from the New Security Paradigms Workshop 2005 Program Chairs

Being program chair the New Security Paradigms Workshop (NSPW) is unlike chairing any other workshop. Not only do the papers cover a wide range of topics, but the spirit of the workshop demands that they be innovative and provocative as well as technically well-founded. The breadth and scope of the submissions never ceases to amaze us. This year was no exception, with topics ranging from the speculative ways to take advantage of emerging technologies to thoughtful suggestions that contravene widely accepted policies. We received 35 submissions and accepted 10 papers and two panels.

We appreciate the effort expended by the members of the program committee in reading and carefully evaluating the papers. The high quality and constructive nature of most of the comments greatly simplified our job in making the final selections. Because the workshop traditions include providing detailed and useful feedback to the authors of rejected papers as well as those we accept, the job of refereeing is difficult and more time-consuming than usual. In many cases, we feel certain that papers we rejected will surface again in other venues, greatly improved as a result of the efforts of our reviewers. In addition to the members of the program committee, reviewing assistance was provided by: Qiang Wei, Hafiz Abdur Rahman, Wing Leung, and Jason Rouse.

Although the number of submissions was down this year from last year's total of 50, we believe that the overall quality was up and that we could have accepted more papers if we had schedule time to accommodate them. This is in stark contrast to a number of conferences that are having a difficult time making an acceptable program of 20 or so papers from 150 or more submissions. We truly appreciate the effort that all the submitters, whether their papers were accepted or not, put into their preparation.

The strong program is made even stronger through the two stage revision process used by the workshop. Authors revise their papers after acceptance for the preliminary proceedings that are distributed at the workshop. During the presentations, which are on the order of an hour of presentation and spirited discussion, several of our regular participants (notably Bob Blakley and Carrie Gates) take detailed notes that are given to the presenters to aid in their revisions for the final proceedings. Thus, the papers you read here have had the benefit of numerous, mostly constructive, comments. We hope that you will find the papers provocative, and perhaps disturbing. If reading them causes you to think about security in a different way, then the workshop is serving its purpose well.

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Session 1
Natural Selection and Monoculture

Panel:
Use of Diversity
as a Defense Mechanims

Session 2
Design
Considerations

Session 3
Authentication

Session 4
Managing Authority

Panel: The Insider Problem Revisisted

Session 5
Forensics

Session 6
Modelling