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IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is about information processing may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

Information Assurance and Security Education and Training

8th IFIP WG 11.8 World Conference on Information Security Education WISE 8, Auckland, New Zealand, July 8-10, 2013, Proceedings WISE 7, Lucerne Switzerland, June 9-10, 2011 and WISE 6, Bento Gonçalves, RS, Brazil, July 27-31, 2009 Revised Selected Papers



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Preface

The World Conference on Information Security Education (WISE) serves to provide a forum for discussing information assurance and security education and awareness and the research supporting both underlying security principles and teaching. This year's conference was held in Auckland, New Zealand, during July 8–10, 2013. This year marked the 8th bi-annual WISE – 16 years old! In this span, we have seen the name of the field shift from information security to information assurance to cyber security. This field is somewhat unique in the computer science body of knowledge because of its cross-cutting nature. Information assurance and security touches every topic in computer science. In programming, our code needs to follow rules and structure that safeguard against unintended paths; our operating systems need to protect resources and data; and our networks need to move data in a manner that preserves integrity, confidentiality, and availability. Our discipline even reaches outside of computer science in developing secure cryptographic functions and security that is "usable."

While this broad application seems daunting, one of the greatest challenges is the competing nature that security plays in our discipline. Security is rarely achieved without some impact on performance, usability, or cost. Our challenge is to ensure that we inculcate the principles of security into the most basic and entry level courses, ensuring that just as we strive to make programs more efficient – we also strive to make them secure. The trailblazers in our community have provided a strong foundation upon which to continue to build the discipline.

These proceedings are in small part a look back over the history of WISE. In one of the new papers for WISE 8, we look back over the 16-year history and discuss the accomplishments of each WISE. We also include papers from WISE 6 and WISE 7 to bring them under the Springer/IFIP listing and make them available to a wider audience. WISE 6 was held in conjunction with the World Conference on Computers in Education (WCCE), July 27–31, 2009, in Bento Gonçalves, RS, Brazil. WISE 7 was held in conjunction with IFIP SEC, June 9–10, 2011, in Lucerne, Switzerland. WISE has always held the paper submission and review process to the strictest of standards. All papers are submitted and reviewed in a double-blind manner and reviewer conflict is identified in an automated process (institution and co-authorship based) as well as self-identified conflict. The reviewer pool is an international body, with representatives from four continents. Each paper receives a minimum of three reviews. While the conference focus is on education and pedagogy, the papers selected represent a cross section of applicable research as well as case studies in security education. VI Preface

For all those who have contributed many a late night organizing, reviewing, and evangelizing – we thank you for the strong base you have provided for our field.

May 2013

Ron Dodge Lynn Futcher

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WISE 8: Ronald Dodge, United States Military Academy, USA WISE 7: Colin Armstrong, Curtin University, Australia WISE 6: Ronald Dodge, United States Military Academy, USA

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