ADSN 2015 Foreword

The Fourteenth Assurance in Distributed Systems and Networks (ADSN 2015) Workshop focuses this time on assurance in software and networks. Since distributed computing systems pervade all walks of our lives with accelerated pace in many different forms, including ubiquitous and pervasive computing, and span over networks, connecting systems ranging from powerful servers to sensor networks, it is more important than ever to assure their proper functionality. Assurance is defined as capability of guaranteeing functional and non-functional system properties such as dependability, security, timeliness and adaptivity according to heterogeneous and changing requirements. Optimizing assurance has become a bigger challenge than ever with ever-growing system complexity and ever-shrinking time-to-market. ADSN is a unique event where a forum is provided for academic and industrial researchers and engineers who focus on next generation solutions for dependable, dynamic distributed systems.

This year we have received 10 manuscripts and only six were accepted after careful review by the Program Committee. We would like to thank all three Program Vice-Chairs and reviewers on the Program Committee for their valuable input and contributions. Our paper selection went extremely smoothly thanks to the good effort of reviewers and skilful and professional coordination of our Program Chair.

In this year’s program we begin with a Keynote Address by a distinguished and accomplished scientist, Prof. Anish Arora from The Ohio State University, whose contributions to foundations of fault tolerance, security, and timeliness are well known.

The first technical session on Network Assurance starts with a paper on improving the lifetime of non-penetrable barrier coverage in sensor networks which is essential in assuring wireless network security, followed by multipath routing capable of countering eavesdropping of data packets. The third paper in this session tackles a protocol assurance by proposing a novel verification model.

Next session deals with all important and ever-growing problem of software assurance. The first paper of this session focuses on robust mobile collaborative work support platform while the second paper presents a case study dealing with tradeoffs identification of self-stabilizing programs using genetic search. The final paper proposes to provide cloud service guarantees by service level agreement-based resource allocation.

Last but not least I would like to express my appreciation to Prof. Mike Liu and Prof. Feng Qin for their support in the Workshop preparation process.

I hope that you will enjoy our Final Program, get actively involved in the presentations (after all it is a Workshop), share you own experience, strike new friendships as well as get inspirations for contributions to next year’s meeting.

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