

Message from the General Chairs

DSN 2024

On behalf of the conference Organizing Committee, we extend you a warm welcome to the 54th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2024), organized by the University of Queensland, Australia. We are excited to have our academic and industry delegates join us and discuss exciting research ideas in dependable systems and networks.

Over the years DSN has become a forum to present the best world research in the fusion between dependability and security research, understanding the need to simultaneously fight against accidental faults, intentional cyber-attacks, design errors, and unexpected operating conditions. DSN 2024 continues to emphasize scientific methods, industrial relevance, rigorous empirical validation and shared value of practical tools and experiences.

DSN 2024 will be held in Brisbane, Australia, June 24-27 2024. Brisbane is the capital city of the beautiful state of Queensland. Brisbane is also a gateway to some of Australia's most renowned attractions. Just a short drive away, you will discover the breathtaking beauty of the Gold Coast's golden beaches, or you can venture to the north to explore the wonders of the Sunshine Coast. Whether it be hanging out with native animals such as kangaroos and koalas, or enjoying the nature in the outback, Brisbane is a hub to all your Australian experience needs. We hope that delegates will also enjoy what Australia has to offer, in addition to the conference program.

DSN 2024 is the result of a collective effort and as General Chairs we are grateful to all the people involved. It has been a pleasure to have the opportunity of working with all of them:

- Marc C. Dacier and Julia Lawall – Program Committee Chairs;
- Jin Hong – Program Coordination Chair;
- Guowei Yang - Local Arrangements Chairs;
- Saurabh Jha, Wilfried Steiner, Phuong Cao - Industry Track Chairs;
- Felicita Di Giandomenico, Eduardo Alchieri – Disrupt 24;
- Karthik Pattabiraman, Roberto Natella – Artifact Chairs;
- Zhi Zhang, Rizwan Asghar - Workshop Chairs;
- Mengmeng Ge, Ermeson Andrade - Doctoral Forum Chairs and Mentoring Program;
- Fumio Machida, Lishan Yang – Posters Track Chairs;
- Roberto Pietrantuono, Long Wang – Tutorial Chair;
- Hyounghick Kim, Xinglian Yuan, Shantanu Pal - Publication Chair;
- Simon Yusuf Enoch, Antonio Pecchia, Chia-Mu Yu, Jiangshan Yu, Shantanu Pal - Publicity Chairs;
- Kana Smith - Finance Chair; and
- Shunyao Wang - Web Master;

The program includes three outstanding keynote speakers, Gernot Heiser, a Scientia (distinguished) professor and John Lions Chair of Operating Systems at UNSW Sydney, Australia; Vanessa Teague, CEO of Thinking Cybersecurity and Adjunct Associate Professor at Australian National University, Australia; and Surya Nepal, a senior principal research scientist at CSIRO's Data61, Australia. Prof. Heiser will discuss dependable operating system in modern ages by presenting Lion OS to demonstrate key concepts of dependable operating system architecture. Dr. Teague will discuss dependability and security issues related to elections and how to verify and audit results for statistical guarantees of an accurate election result. Dr. Nepal will discuss the outlooks of critical technologies and cybersecurity research for the next

10 years, including the roles of emerging technologies such as artificial intelligence and machine learning, quantum computing, 6G, augmented/virtual/extended reality systems, and digital twins. These three talks discuss updated and very interesting aspects of dependability from complementary perspectives, from academia and industry.

Disrupt (Disruptive Ideas and New Interdisciplinary Results) continues in DSN 2024, expanding its success from the DSN 2023 to deliver highly innovative ideas and forward-looking research on dependability, including interdisciplinary research that cross cuts dependability with application areas where safety, security, privacy, and computer systems resilience are primary concerns. Disrupt 24 captured papers on disruptive ideas and thought-provoking reflections, new interdisciplinary dependability perspectives and results, as well as emergent and highly innovative results. We also introduced the Posters track to enable authors more venues to share their research during the conference. We would like to thank all the authors/contributors for submitting their work to DSN and for giving us the opportunity to assemble a high-quality program. Finally, we recognize that the high quality of the program is the ultimate result of the review activities carried out by the members of the different Program Committees.

We are grateful to the IEEE for publishing the proceedings of DSN 2024 and, in particular, to the Technical Community on Dependable Computing and Fault Tolerance (TCFT) and to the IFIP Working Group 10.4 on Dependable Computing and Fault Tolerance, which together support the conference. A special appreciation to the DSN Steering Committee, chaired by Domenico Cotroneo, for the precious guidance and suggestions!

We hope you will enjoy an exciting and stimulating DSN 2024!

Dan Dongseong Kim, *University of Queensland, Australia*
Ryan Ko, *University of Queensland, Australia*
DSN 2024 General Chairs