



DCS-WATER '25

DCS-Water '25: 2nd International Conference on the Design of Cyber-Secure Water Plants

October 29, 2025

8:00am – 4:00pm, Reception following

The Water Tower, Buford, Georgia and Virtual

Thank you to our Conference Sponsors



Conference Program

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| 8:00 | Continental Breakfast and Networking (Lobby) |
| 8:30 | Conference Opening (Multipurpose Room)
Melissa Meeker , CEO of The Water Tower |
| 8:35 | <i>Setting the Stage for Cybersecure Water Utilities</i>
Cole Dutton , Cybersecurity Engineer, U.S. Environmental Protection Agency - INVITED |
| 8:45 | <i>Introduction of Keynote I</i>
Aditya Mathur , iTrust, Singapore University of Technology and Design |
| 8:50 | <i>Water 4.0 and the Road to 5.0: Resilience, Security, and the Future of Water Systems</i>
Stefano Galelli , Cornell University, Ithaca, NY, USA |
| 9:20 | Regular Session I Chair: Gauthama Ramani

<i>Customizing Lightweight TTnet Architecture with TFHE for Privacy-Preserving Deep Learning Time-Series Analytics in Water Infrastructures Monitoring</i>
Alvin Chew , Bently Systems, Singapore |
| 9:50 | <i>TE-LSTM-AE: A Group-Aware Temporal Autoencoder for Anomaly Detection in Water Treatment Systems</i>
Babangida Abdullahi and Sunil Vadera , University of Salford, UK |
| 10:20 | <i>XAI for Intrusion Detection in Water Distribution Systems: A Case Study Using the WADI Dataset</i>
Salman Shahid , University of Alabama, Birmingham, USA |

- 10:50 *Data Driven Approach for the Identification of Rules and Model Features for Anomaly Detection in Cyber Physical Systems*
Wen Ni Pang and **Jonathan WW Goh**, Ensign Infosecurity, Singapore
- 11:20 *A Context Aware Cybersecurity Assessment Methodology for Industrial Control Systems in the Water Industry*
Fabian Voggensberger¹, **João Henrique Schmidt²**, **Victor Mattos²**, **Gaurav Srivastava¹** **Daniel S. Menasché²**, **Amit Bhaya²**, and **Alan O. de Sá³**, ¹Siemens Corporation, Princeton NJ, USA, ²Federal University of Rio de Janeiro (UFRJ), Brazil, ³University of Lisbon, Portugal
- 11:50 *Cybersecurity and Infrastructure Security Agency (CISA) Tools and Resources*
Stanton Gatewood, Cybersecurity State Coordinator (Georgia) - INVITED
- 12:10 Lunch will be held in the lobby
- 12:45 *Introduction of Keynote II*
Aditya Mathur, iTrust, Singapore University of Technology and Design
- 12:50 *Vulnerabilities of Yesterday, Threats of Today – Cyber-Physical Defenses*
Wenke Lee, Georgia Tech, Atlanta, USA
- 1:20 R&D For OT Technologies **Chair: Aditya Mathur**
OT in RIE2030
Andre Foo, Cyber Security Agency, Singapore
Automating Anomaly Detection Using AI
Jonathan Goh, Ensign Infosecurity
Scaling up Design-Infused Anomaly Detection
Aditya Mathur and **Gauthama Ramani** SUTD, Singapore
- 2:50 Regular Session II **Chair: Melissa Meeker**
Building a Resilient OT Cybersecurity Program for Water Utilities: A Holistic Approach
Kam Chumley-Soltani (Armis) and **Keith Walsh** (1898 & Co.)
- 3:20 *Operational Resilience During Active Cyberattacks: Governance, Risk, Resilience, and Compliance in Water Utilities*
Kevin Montague (DeKalb County) and **Kenn Bengtsson** (Tetra Tech)
- 3:45 *Securing Critical Water Infrastructure—A Converged OT/IT Cybersecurity Approach*
Manoj Kumar, Global Solutions Group
- 4:15 Closing
Networking Reception to follow