

**SWIG Workshop:
Sensor-driven artificial intelligence for the water industry
30 November 2022**

Sandy Park Rugby Club, Sandy Park Way, Exeter EX2 7NN

This workshop will explore:

- The different approaches to AI with respect to different types and sources of data.
- The current status and future plans/aspirations for the use of AI in the water industry.
- Specific opportunities/applications for the use of AI, and business benefits.
- Barriers to successful implementation (e.g. business readiness/data management capability, changes to business processes and people/culture).
- Research and AI solution development to meet future water industry requirements.

Chairs: Richard Luxton, IBST, UWE and Andy Nichols, University of Sheffield

09:30 Tea, Coffee & registration

10:00 Introduction – what is AI? **Richard Luxton, IBST, UWE**

10:30 Are you ready for Judgement Day? – A water company perspective on AI readiness. **Chris Shears, South West Water**

11:00 Control operations journey. **Pradeep Rao, Affinity Water**

11:30 Tea & Coffee

12:00 Data analytics for service reservoir quality. **David Reynolds, ATi & John Gaffney, Siemens**

12:30 Why is data quality so important anyway? Making the most of sensor data for reliable AI-driven models. **Suhayl Zulfiquar, Datatecnics & University of Exeter, & Ramiz Beig Zali, Datatecnics**

13:00 Lunch

14:00 Maintaining CSO performance through AI. **Adam Cartwright, Siemens & Will Shepherd, University of Sheffield**

14:30 Increasing sewer inspection efficiency through AI: United Utilities case study. **Nathan Muggeridge, VAPAR**

15:00 The role of deep learning in the water industry: Current research and future perspectives. **David Butler, University of Exeter**

15:30 Panel discussion and afternoon summary led by chairs

15:50 Close