

Waterston is a start-up developing AI algorithms for monitoring and assessing water quality. The team's expertise encompasses crafting datasets for AI training and creating pre-built algorithms for quality assurance.

#Artificialintelligence

#waterquality

#smartcity

#watermonitoring

#waterscarcity

#Watertech



Looking for partners & collaborations : We are interested in joining an international consortium that participates in EU funding programs, with the prospect of collaborating with industry partners in the water supply management sector.

OPEN HORIZON EUROPE CALLS

CALL ID

Holistic approaches for effective monitoring of water quality in urban areas

HORIZON-CL6-2024-ZEROPOLLUTION-02-1-two-stage

New circular solutions and decentralised approaches for water and wastewater management

HORIZON-CL6-2024-CircBio-02-4-two-stage



Why Waterston exists : By employing artificial intelligence, we seek to uncover knowledge and insights that were previously out of reach, thereby improving the safety, predictability, and traceability of the water quality.



Our Belief : We believe that analyzing water's physicochemical parameters enables us to do much more than simply determine compliance with regulatory standards. Through data mining and detailed analysis, we can identify specific types of contaminations, trace their origins, evaluate the risks of biological contamination, and predict the water quality in the future.



Technological Capabilities :

- Utilizing commercial physicochemical sensors, we have built pilot equipment for on-site water data mining. This equipment is portable, user-friendly, and facilitates water quality monitoring in various locations.
- We have established a testing infrastructure for data storage, labelling, and processing that ensures convenient access for data validation and analysis.
- Our team has developed a suite of proof-of-concept solutions that include algorithms for detecting anomalies in sensor readings, identifying water contamination events, classifying types of contamination sources, and estimating the probability of biological contamination. These innovations provide a solid foundation for collaboration within larger consortia.
- Our preliminary water quality datasets comprise over 10 million labeled data points, available to prototype AI's capabilities in water quality assessment.
- Over the past 5 years, our team has developed a methodology and system for creating, labeling, and harmonizing water quality datasets tailored for AI training purposes.

Team experience:



The team has implemented over 10 studies related to water quality monitoring in their experience. The total research experience on the topic is more than 12 years.



More than 60 years of collective experience in the water sector. The team includes water engineers with practical and academic experience in the drinking water industry.



Consequently, the team has successfully developed competencies in AI training, IT and data processing infrastructure, as well as in product development and team management.

Core Team members:



Dr.sc.ing. Sandis Dejus
Drinking water researcher



Mg.Sc.ing. Mārtiņš Bonders
IT System Architect, DevOps



Dr.sc.ing. Sergei Parshutin
Researcher in data science,
machine learning and deep
learning



Dr.sc.ing. Jānis Rubulis
Drinking water researcher



Dr.sc.ing. Tālis Juhna
Scientist in water technologies



B. Sc. ing. Valts Urbanovičs
Researcher in water
technologies



Dāvids Štēbelis
Team lead and CEO



Offices Address

Latvia, Riga, O.Vaciesa 7-1, LV1004
Estonia, Tallinn, Narva mnt 5, 10117



Email Address

info@waterson.lv