Artificial Intelligence for sustainability: a data-driven tongue for Barcelona drinking water

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Complex Heterogeneous Distributed

Critical Highly dynamic

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The challenge

AI for sustainability: to build a data-driven digital tongue to expand the use of tap water in Barcelona

- On-going effort to improve the odour and taste of tap water in Barcelona.
- The perception taste of water is a complex function which depends on multiple factors (source, compound matrix, weather…).
- The ability to model and infer in real-time the perceived taste of water may provide relevant insight to improve the operation.

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Tech

- Sensor data (a lot) on water parameters (temperature, PH, conductivity, turbidity....)

- Labelled data on perceived water taste

- AI

- Computing infrastructure

- Hyperspectral imaging?

- Edge-computing and distributed Machine Learning?

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But also

Real-world deployment

Real-world experts

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Gràcies

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