

ENDURANT

Sensor Data Fusion for Urban Automation

INSIGHTS FOR URBAN AUTOMATION FROM BIG MACHINE DATA

The main goal of the project is to develop smart, multidisciplinary data processing abilities for the benefit of modern urban environments by fusing a wide variety of sensor and machine data.

Machine-generated data covers all the data generated by machines without direct human intervention, from the tiniest sensors to huge data centers. It is predicted to constitute over 40% of all the data in the world in 2020. Meanwhile, the fragmentation of today's device market has led to a number of challenges due to ever increasing network system complexity and device heterogeneity. These factors make it difficult to consolidate data from various sources for decision-making and automation.

The ENDURANT project will build a highly effective and scalable data processing and analytics pipeline with specific focus on combining machine-generated data from a wide variety of heterogeneous sources, and connecting to many kinds of data sinks. The key components of the solution are selected with emphasis on horizontal scalability, and interchangeability for the needs of different application domains.

Example application domains: Remote monitoring and maintenance for buildings, Security & surveillance, Heat/lighting systems, Tracking & Asset management, Logistics, Environment & Energy management.

Key aims of the project:

- Harness the untapped potential of machine-generated big data and make it available for data analytics and modern urban automation.
- Build a data processing pipeline for high volume, high velocity machinegenerated data.
- Focus on the collection, organization and storage of data streams, while enabling a rich selection of data processing, analytics, automation and visualization options.
- Emphasize key component interchangeability and horizontal scalability.



CONTACT PERSON

> Jussi Ronkainen

- > jussi.ronkainen@vtt.fi
- > +358405418892

ORGANISATION

> VTT, Finland

CONSORTIUM STATUS

> Preliminary / Early phase

AVAILABLE KEY PARTNERS > RTO

MISSING PARTNERS

- > Technology providers
- > Technology adopters
- > RTO