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Track&Know: Big Data applications in transport, mobility, motor insurance and health sectors

The KDDLab (Knowledge Discovery and Data Mining Laboratory) of Cnr-Isti applies its expertise in Big Mobility Data Analysis

Track&Know is a project funded by the European Union's Horizon 2020 research and innovation programme. The consortium of 14 partners from 9 different countries kicked-off in January. Since then a team of top researchers and industry representatives got off to a flying start. During this 3-year project, the goal is to research, develop and exploit a new software framework to increase efficiency of Big Data applications in transport, mobility, motor insurance and health sectors. Moreover, the project will develop user-friendly toolboxes that will be readily applicable in the addressed markets after efficiency validation in real-world pilots. The KDDLab is one of the research partners, it coordinates the activities related to big data analytics for mobility data and actively participates to the development of pilot applications.

What are Big Data?

We talk about Big Data when processing and making decisions using large amounts of varied data that continues to grow. Known as the 3 V's of Big Data, these characteristics of Volume, Variety and Velocity make the storage and processing of this data unsuitable for traditional database and processing systems. Sectors such as healthcare and transport can benefit for Big Data processing by applying data driven approaches to identifying trends that can reduce costs, lower the carbon footprint of various services, and improve consumer satisfaction. Through location data collected by smart devices (e.g. cars, black-boxes, medical monitoring systems) coupled with other public and proprietary datasets (e.g. socio-demographic makeup, environmental sensors, weather information, and propensity maps) different systems and processes can be optimised.

How will Track&Know make a difference in society? The Consortium Perspective

Dr. Ibad Kureshi, Inlecom Systems (project coordinator): *"Track&Know will develop new technologies and approaches in Big Data driven ecosystems. Think of applications in intelligent mobility services; autonomous, connected and shared vehicle technologies; healthcare; predictive maintenance, finance and insurance... We will develop user-friendly toolboxes for intelligent and integrated services with predictive safety capabilities, for example for collision avoidance, optimized emergency response and/or accident management, driving skills deterioration, adaptable insurance services.... Our goal is to reshape the way that visualization techniques make data accessible in ways humans understand."*

Top researchers from different sectors apply their expertise on Big Data

Track&Know brings together interdisciplinary partners from the transport, insurance, healthcare industries, academia and research along with users and data-provision partners focusing on real-life and user-defined challenges. The complementary research team has a proven track record of high quality research capacity, all combining their expertise to deliver market-relevant outcomes of significant exploitation potential. Prof. dr. Yannis Theodoridis, UPRC (University of Piraeus Research Centre): *"We address the open issues arising from the automotive transportation in modern*



metropolitan areas and increase the contextual awareness in urban mobility by delivering intelligent information and predictive analytics to user-interest groups, stakeholders and city managers.”

More information:

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See also: <https://trackandknowproject.eu>