

TRACK: TECHNOLOGY, PLATFORMS, AND IMPACT

EVEREST SDK: High-Performance, Distributed, Reconfigurable and Heterogeneous Platforms for Extreme-Scale Data Analytics

November 23, 09:00- 10:00

Sponsored session by:

 **EVEREST**

ORGANISED BY:



IN COLLABORATION WITH:



UNDER THE AUSPICES OF:



EVEREST project

dEsign enVironmEnt foR Extreme-Scale big data analyTics on heterogeneous platforms

Goal

The EVEREST project aims at developing a holistic design environment that simplifies the programmability of High Performance Big Data analytics for heterogeneous, distributed, scalable and secure systems.

EVEREST project

Grant agreement ID	957269
Start date	1 October 2020
End date	30 September 2023
Overall budget	€ 5 037 372,50
EU contribution	€ 5 037 372,50
Programme	H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)
Call	H2020-ICT-2020-1
Topic	ICT-51-2020 - Big Data technologies and extreme-scale analytics
Coordinator	IBM Research GMBH, Zurich, Switzerland
Web	https://everest-h2020.eu

EVEREST Partners



IBM Reseach Lab, Zurich (Switzerland)

Project administration, prototype of the target system

PI: Christoph Hagleitner



Università della Svizzera italiana (Switzerland)

Data security requirements and protection techniques

PI: Francesco Regazzoni



Centro Internazionale di Monitoraggio Ambientale (Italy)

Weather prediction models

PI: Antonio Parodi



Virtual Open Systems (France)

Virtualization techniques, runtime extensions to manage heterogeneous resources

PI: Michele Paolino



Numtech (France)

Application for monitoring the air quality of industrial sites

PI: Fabien Brocheton

Politecnico di Milano (Italy)

Scientific management, high-level synthesis, flexible memory manager, autotuning

PI: Christian Pilato



TU Dresden (Germany)

Domain-specific extensions, code optimizations and variants

PI: Jeronimo Castrillon



IT4Innovations (Czech Republic)

Exploitation leaders, large HPC infrastructure, workflow libraries

PI: Katerina Slaninova



Duferco Energia (Italy)

Application for prediction of renewable energies

PI: Lorenzo Pittaluga



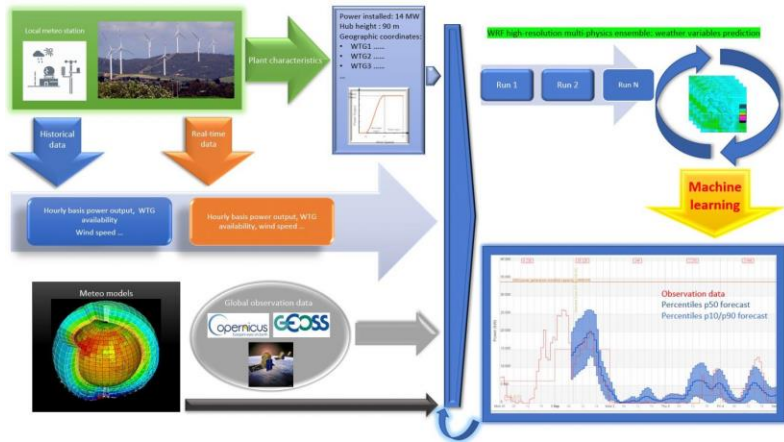
Sydic A/S (Slovakia)

Application for intelligent transportation in smart cities

PI: Radim Cmar

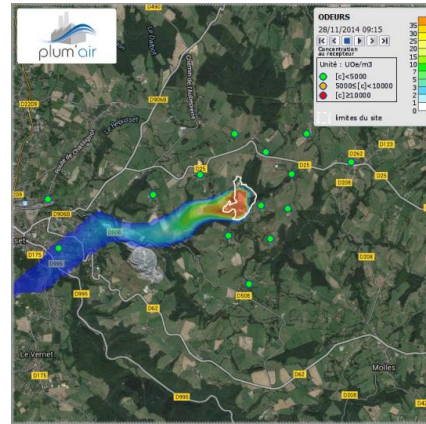


EVEREST – Target Applications



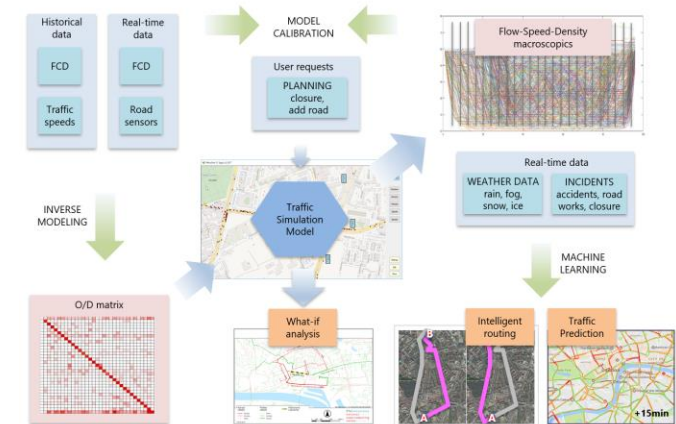
Renewable-energy prediction

Weather analysis-based prediction for the renewable energy trading



Air-quality monitoring

Application for air-quality monitoring of industrial sites



Traffic modeling

Real-time traffic modeling for transportation in smart cities



Agenda

- **Opening of the special session and a short introduction to EVEREST project**
Speaker: Katerina Slaninova, IT4Innovations, Czech Republic
- **EVEREST SDK: Environment for High-Performance, Distributed, Reconfigurable and Heterogeneous Platforms**
Speaker: Christian Pilato, Politecnico di Milano, Italy
- **Traffic modelling for intelligent transportation in smart cities**
Speaker: Radim Cmar, Sygic, Slovakia
- **Weather modelling and prediction**
Speaker: Antonella Galizia, CIMA Foundation, Italy
- **Air quality monitoring in industrial sites**
Speaker: Fabien Brocheton, Numtech, France
- **Weather-based prediction of renewable energy production**
Speaker: Riccardo Cevasco, Duferco Energia, Italy

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EUROPEAN
**BIG DATA
VALUE** FORUM

November 23, 09:00- 10:00



Christian Pilato
Scientific coordinator of EVEREST
Politecnico di Milano



Radim Cmar
Sygic



Antonella Galizia
CIMA Foundation



Kateřina Slaninová
IT4Innovations



Fabien Brocheton
Numtech



Riccardo Cevasco
Duferco Energia

Thank you!

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