Keynote Speech 2
City of Barcelona's deployment of fog computing for improved citizen and city services

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Abstract: Like mobile edge computing, fog computing operates at the edge of networks to allow content, services and applications to be computed, resulting in faster response times. Yet fog computing is a superset of MEC, providing additional functionality in the Internet of Things (IoT), robotics, artificial intelligence, the tactile Internet and other scenarios. This keynote will discuss what fog is and how it works with mobile edge and cloud, and discuss how the fog computing architecture supports compute, control, networking and storage at the edge, across all access modes. It will also discuss the city of Barcelona's own deployment of fog computing for improved citizen and city services.

Biography: David Carrera received the MS degree at the Technical University of Catalonia (UPC) in 2002 and his PhD from the same university in 2008. He is an associate professor at the Computer Architecture Department of the UPC. He is also the Head of the "DataCentric Computing" research group at the Barcelona Supercomputing Center (BSC). His research interests are focused on the performance management of data center workloads. In 2015 he was awarded an ERC Starting Grant for the project HiEST, and ICREA Academia award and an ERC Proof of Concept grant ('Hi-OMICS') in 2017 to explore the commercialization of an SDI orchestrator for genomics workloads. He has participated in several EU-funded projects and has led the team at BSC that has developed the Aloja project (aloja.bsc.es) and the servIoTicy platform (servioticy.com). He is the PI for several industrial projects and collaborations with IBM, Microsoft and Cisco among others.He was a summer intern at IBM Watson (Hawthorne, NY) in 2006, and a Visiting Research Scholar at IBM Watson (Yorktown, NY) in 2012. He received an IBM Faculty Award in 2010. He is an IEEE and ACM member.