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## Fog and Fogonomics

Challenges and Practices of Fog Computing, Networking, Strategy, and Economics

### Call for Contributors

With the development of Internet of Things technology, connected devices will generate huge amounts of data every single day. It becomes a big challenge to analyze and create actionable information from the data. Fog computing, as a promising solution to extend the capability of Clouds, has attracted considerable attention. Fogs are lightweight distributed technology platforms. To improve efficiency and reduce the amount of data transported to the cloud for processing, analysis and storage, it extends cloud computing and services to the edge of the network, bringing the advantages and power of the cloud closer to where data is created and acted upon. Fog computing aims to create a smart environment with networked devices, which distributes computing, storage, control, and networking functions in the most logical, efficient place between the data source and the cloud. To successfully build upon, integrate with, or create a fog environment requires an understanding of its common inner mechanics, architectural layers, and models, as well as an understanding of the business and economic factors that result from the adoption and real-world use of fog-based services.

This book aims to establish concrete, technology-centric coverage with a focus on the system model, architectures, and well-defined building blocks for fog computing platforms and solutions. Subsequent to the technology-centric coverage, the book proceeds to establish business models and metrics that allow for the economic assessment of fog-based ICT resources, especially for mobile resources. In some cases, the fog enables new business models, strategies, and competitive differentiation, as with ecosystems of connected, smart, digital products and services. In other cases, costs can be minimized through statistical workload aggregation effects or backhaul data transport reduction, customer experience and safety can be enhanced through reduced response time, and revenue and competitive advantage can be enhanced through new fog-enabled business models.

We are soliciting chapter contributions with technical and economic insights for the scopes of this book. Topics of interest include, but are not limited to:

- ◆ Fog Computing Reference Architecture
- ◆ Fog Standardization Activities
- ◆ Manageability of Fog Networks
- ◆ Interoperability between Cloud, Fog, Edge and Things
- ◆ Software Infrastructure for Fog Services
- ◆ Fog-Enabled Applications
- ◆ Fog-Enabled Competitive Strategies
- ◆ Economic Modeling and Analysis of Fog Computing and Networking
- ◆ Fogonomics and Potential Advantages
- ◆ Mobile Data Trading and Task Offloading
- ◆ Fog Business Models and Challenges

- ◆ Distributed SLA Negotiation
- ◆ Fog Security and Privacy
- ◆ Fog As A Service Technology
- ◆ Fog Services and Case Studies

#### **Important Dates**

- ◆ Chapter Abstract Submission (<2 pages, including a chapter structure): 15 Jan. 2018
- ◆ Invitation for Chapter Contributors: 1 Feb. 2018
- ◆ Full Chapter Submission (magazine-style): 15 Mar. 2018
- ◆ Review Result to Chapter Contributors: 1 May 2018
- ◆ Final Version Submission: 1 Jun. 2018
- ◆ Final Acceptance Notification: 1 Jul. 2018
- ◆ Camera-Ready Submission: 1 Aug. 2018

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