

## Smart Cities: Software Services and Cyber Infrastructure

### Call for Book Chapters

#### Introduction

This call for book chapters is seeking chapter proposals for a handbook in Smart Cities to be published by Springer in 2018.

Smart city is the culmination of applying cutting-edge cyber-physical concepts to city resource management scenarios such as water supply, energy distribution, transportation management and public safety to streamline them for higher operational efficiencies. This is made possible by the tremendous recent advancement in technologies such as cloud computing, computer networking, and Internet of Things. In smart city deployments, sensors and actuators that generate and consume massive volumes of data under diverse formats and ontologies will be integrated into the overall system. The data created by the participating devices need to be appropriately classified and related so that duplication and conflicts can be minimized. To handle the massive volumes of data in a timely manner and to prevent overloads in the cloud infrastructure, newer edge computing paradigms need to be developed.

#### Objectives of the Book

This book will be targeted towards researchers, developers of smart city technologies, graduate students in the fields of communication systems, computer science, and data science. It is meant to provide a snapshot of the state-of-the-art at the time of its writing in several key software services and cyber infrastructures as pertinent to smart cities. We believe the book could accelerate the development of this area by providing a coherent document that captures a collection of ongoing research thrusts and deployment experiences in smart cities.

#### Topics of Interest (not limited to)

- Enabling wireless communication technologies for smart cities
- High-speed networking infrastructure for smart cities
- Cloud computing infrastructure for smart cities
- Edge computing for smart cities
- Sensing and Internet of Things infrastructure for smart cities
- Energy aware or low energy systems and technologies
- Low maintenance embedded systems and networks
- QoS of smart city systems, applications, and services
- Service innovation and design to support smart cities
- Management, configuration and deployment of smart city infrastructure
- Application, deployment, test-bed, and experiences in smart cities
- Big data acquisition, preprocessing, data storage and management for urban informatics
- Data privacy, security, and trust issues in smart cities
- Smart data for social entrepreneurship and community engagement
- Sharing economy in smart cities
- Mobile crowdsourcing for urban analytics

## Important Dates and Proposal

The chapter proposal should be 1-2 pages long. It should describe the topic of the chapter and include the following information: the organization of the chapter and anticipated number of pages. With the chapter proposal also submit a brief biography of each author.

Proposal submission deadline: June 25, 2017

Notification of proposal acceptance: July 25, 2017

Full chapter draft submission deadline: October 15, 2017

Chapter review to authors: December 1, 2017

Final chapter submission deadline: January 15, 2018

## Full chapter draft submission

Chapters have to be about 20-25 A4 pages length and will be reviewed by two/three reviewers to ensure the quality of the book.

## Final Manuscript Submission

Latex or word templates will be provided for formatting the chapters.

For more details regarding the book, please visit: <http://www.cs.mcgill.ca/~maheswar/smart-cities>.  
Submission dates and author guides are available on this link.

## Editors and Contact

Dr. Muthucumaru Maheswaran  
School of Computer Science  
McGill University  
Montreal, Canada  
[maheswar@cs.mcgill.ca](mailto:maheswar@cs.mcgill.ca)

Dr. Elarbi Badidi  
College of Information Technology  
United Arab Emirates University  
United Arab Emirates  
[ebadidi@uaeu.ac.ae](mailto:ebadidi@uaeu.ac.ae)