Big Data Analytics: A tutorial-based Advanced Introduction

'Big Data', 'Smart', 'Cognitive Computing' are buzz words we are going to hear a lot of in the coming years. What do they mean, what benefits do they offer, and how can we exploit them for solving real-world problems in our own domain? This advanced Tutorial-style Talk will answer many such questions by introducing the audience to the underlying motivation, and design of relatively simple, generic cognitive computing architectures for solving a wide-range of real-world, Big-Data, context-aware applications - ranging from smart cities (e.g. data-driven systems for transport, waste management, law enforcement, and energy), social media and wireless communications, to customer relationship management, marketing campaigns, efficient advertisement scheduling and so on.

The Talk will also introduce the audience to a number of selected, highly popular Big Data algorithms, architectures and implementations - including graphical processing units (GPUs), deep learning algorithms and development frameworks - in addition to demonstrating how such advanced methods and tools can be effectively used in practical, multi-disciplinary Big Data applications.