**Cloud Computing Frameworks and Services for Big Data Analysis**

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Cloud computing offers scalable services for addressing the computational and data storage needs of Big Data analysis applications and for implementing machine learning services. According to this approach, Cloud computing software frameworks can be efficiently used for supporting Big Data analysis applications and services. The three main service models, software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS), can be exploited for implementing Big Data analytics and machine learning applications in the cloud. This keynote discusses approaches, models, frameworks, and tools to be utilized in Cloud computing platforms for implementing Big Data mining services. The talk presents the design of data analysis applications according to the data analytics as a service (DAaaS) model. Distributed data mining techniques and frameworks designed for developing service-oriented distributed data analysis applications on Clouds will be discussed. In particular, the talk discusses how to develop big data mining services using the Data Mining Cloud Framework. Data analysis software design and use-cases performance are illustrated. Open research issues and trends will be also outlined.