

Speakers:

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Topic Title:

Emerging Technology and Applications with Big Data, Machine Learning and Cloud

Topic Abstract:

Data driven analytics and decision making is broadly recognized as the next frontier in information technology. The challenges presented in the diversity of data, data scale, constantly changing data patterns and privacy are few areas where Big Data is driving the way we leverage technology services in conjunction with intelligence derived from large scale machine learning. Services that are deployed to cloud need to be managed for different parameters like reliability, usage, performance, and security. The information for the analytics comes from diverse sources requiring high volume and high velocity data crunching capabilities. The algorithms for data crunching and pattern recognition ranges from simple correlations, cosine similarities etc., to advanced generative and discriminative machine learnt models involving supervised, unsupervised, and hybrid approaches.

In this presentation, we shall present a few areas where Big Data and analytics have transformed the way technology has evolved and influenced our lives. We shall present some approaches found useful to enable large scale learning and discovery of patterns with meaningful consumer facing applications. We will cover technologies such as Azure which enable solving Big Data problems efficiently and effectively. We will present how the Azure infrastructure can be leveraged in workflow / pipeline based data processing for doing simple correlations and more involved learning techniques. Additionally, we will cover the open source infrastructure capabilities azure provides to solve these kinds of problems. We will conclude with briefly presenting algorithms behind some popular application using some advanced algorithms that play into our day to day lives.