**The 5ᵗʰ Annual Business Analytics Symposium**
**Tech Talks**
**March 5, 2020**

Center for Innovation and
Digital Transformation
Bridging Business and Research

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## Title: Building an Agile Organization through AI

**Synopsis:**
"The concept of 'Organizational Agility', whether one refers to execution methodology or strategic vision, refers to one's ability to change direction (or restore direction) in a short-burst of time. The rate of processing information, the rate of incorporating processed information into decision making and translating these upgraded beliefs into action are the three factors that govern organizational agility. Artificial Intelligence excels in leveraging both scale and speed: Scale at which we process information and the Speed with which we upgrade our prior beliefs by incorporating new information. This is exactly what helps build Agile organizations. This TechTalk will discuss how AI quickly adapts and processes information to bring in Agility.

**Speaker Bio:**

**Dr. Ramesh Patil** brings to Digité over 30 years of rich experience as an academician, entrepreneur and technologist. Ramesh is a pioneer in the field of Artificial Intelligence and its application to medicine and has served on the faculty of Computer Science at MIT and University of Southern California, Information Sciences Institute. In 1997, Ramesh was lured into entrepreneurship and joined Rightworks; a provider of B2B e-business applications. Ramesh served as the CTO from its inception till the year 2000 when the company was bought over by i2 Technologies. At i2, Ramesh was VP Technology and Technology Strategy till 2004. Ramesh holds a bachelor's degree in Electronics Engineering from Indian Institute of Technology (IIT) Kharagpur, a master's degree from IIT Kanpur and a Ph.D in Computer Sciences from Massachusetts Institute of Technology. He is also a fellow of the American Association for Artificial Intelligence (AAAI) and American College of Medical Informatics (ACMI) and was the Editor-in-Chief of AI Magazine from 1991-96.

## Title:  Building Personalization through reinforcement learning (millions of travelers use case)

**Synopsis:**
It is common knowledge that Personalization is becoming table stakes in every industry. In travel, it is probably the biggest brand differentiator. Some go as far as calling it the next "loyalty". Connecting to the customer at every stage of the retailing process will often trump the cheapest or the best product. With the exponential growth in AI, we are at a stage where the technology capabilities and trends are funneling us towards enabling a high degree of customized and personalized experiences to our customers.  The advancements in machine learning, allow companies to creatively leverage Reinforcement Learning methods to take suitable actions by relying on the environmental factors to maximize rewards.  This session will explore the ways Reinforcement Learning can be used to drive personalization in the Retail industry.

**Speaker Bios:**

**Vidhya Balakrishnan** is a Senior Director for Retailing Solutions at Sabre. In her current role, Vidhya is responsible to drive the Retailing technology strategy and product development for Sabre's customers leveraging Data & AI technologies. Vidhya has over 2 decades of experience in managing Engineering teams for Data Analytics, CRM, Guest Experience and Merchandising solutions.

**Rajeev Bellubbi** is a Senior Principal, Sabre Labs and Product Strategy at Sabre. Rajeev is responsible for creating innovative solutions to drive the various cross section of Sabre's products and offerings, with specific focus on enterprise software, AI / ML technologies and rapid prototyping. Rajeev has over 2 decades of experience in building large scale enterprise solutions.

# Title: Behavioral analytics is not just for retail

**Synopsis:**

The use of Behavioral Analytics often focuses on providing insights into the actions of people but what about the actions of organizations, competitors and industries. The experts in this session will help you understand how behavioral analytics are being used to win billion-dollar deals, to build new market segmentation and to decide on new products. Get ready to enjoy a highly interactive panel of extraordinary experts.

**Speaker Bios:**

**Steve Roemerman** is the Chairman of Lonestar Analysis. The firm serves clients in defense, aerospace, manufacturing, transportation, and energy. He began his professional career at Texas Instruments. He did analytics of semiconductor design, as chips became too complex for humans to design. His TI experience included the first 16-Bit microprocessor, early Air Force Artificial Intelligence, early mobile phones, geophysical exploration, and the F-117. Among his honors are the NDIA's Small Business Executive award, and Aviation Week's Laurels award. He holds dozens of patents, awarded and pending. He leads an international effort to improve the state and application of analytics in modern society.
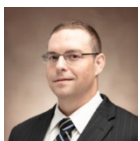
**Caleb Baucom** is a Price to Win manager at L3Harris, a defense contractor with large portfolio of mission solutions ranging from maritime to space. In his role, he uses quantitative and qualitative data to predict competitor bids to position his company to win competitive defense contracts. Some of the skillsets required include competitive intelligence, parametric models, market insights, customer analysis, budget analysis, and procurement procedures. His efforts have directly led to the capture of $2B in business. In his spare time, he enjoys building predictive models to analyze anything he finds of interest, including college football, NCAA march madness, and housing prices. Caleb lives in Rockwall, TX with his wife Brittany and their three beautiful daughters, Vivian (6), Rose (4), and Scarlett (2).

## Title: It's not about the algorithm, it's about the logistics.

**Synopsis:**
How do you get a machine learning system to deliver value from big data?  It turns out that 90% of the effort required for success in machine learning is not the algorithm or the model or the learning - it's the logistics. Ted Dunning, co-author of Machine Learning Logistics, will identify what matters in machine learning logistics, what challenges arise, especially in a production setting, and the introduction of an innovative solution: the rendezvous architecture. This new design for model management is based on a streaming approach in a microservices style. Rendezvous addresses the need to preserve and share raw data, to do effective model-to-model comparisons and to have new models on standby, ready for a hot hand-off when a production model needs to be replaced.

**Speaker Bio:**

**Ted Dunning** is a PHD in Computer Science and an author of 6 books focused on data sciences.  Ted began his career developing new statistical methods that advanced the state of the art in 5 different application areas related to human language and genomics.  Later as a Chief Scientist he developed and implemented algorithms to improve website performance driving dramatic profitability improvements for clients.  For the past 10 years, Ted has been the Chief Application Architect for MapR Technologies, now an HPE company.  He has over 25 patents in the area of Data Sciences and Analytics.  At MapR, he has been instrumental in building the industry's only converged platform that integrates the power of Hadoop and Spark with global event streaming harnessing the enormous power of data analytics.


## Title: How AI is shaping Telecom Operations (with real world examples of applied AI).

**Synopsis:**
Managing Telecom Networks is becoming more complex due to the constantly increasing number of connected devices that comes with IoT and 5G, but also because of more diverse service requirements, a constant flow of new applications and changing user behaviors. In this session you will learn how this complexity is making AI/ML a necessity in a Telecom Operations and how Telecom networks need to move beyond just enabling connectivity, to become data driven, proactive and preventive.  The Telecom use case is a great example of dealing with operations complexity and will help those outside of telecom see the path to creating their own AI driven operations.


**Speaker Bio:**

**Ulrika Jägare** is the Head of AI/ML Strategy Execution at Ericsson North America. She sets and drives the strategic direction in AI/ML, secures operational alignment and engage with customers and industry stakeholders in AI/ML. In her previous role as Director Technology and Architecture at the CTO office, with main focus on Data and AI/ML, Ulrika drove the strategic direction throughout the Ericsson Group. She has been with Ericsson for 20 years in various positions in RAN R&D, Product Management, CTO office, and Managed Services. Ulrika holds a Master of Science degree from the University of Lund, Sweden and is the author of *Data Science Strategy for dummies, Unified*

*Analytics for dummies and Embedded Machine Learning Design for dummies (published by Wiley).*