

**HYUNDAI MOTOR AMERICA SEMINAR SERIES ON  
TECHNOLOGY INNOVATIONS AND THE FUTURE OF TRANSPORTATION**

**Friday, March 4, 2016, 10:00am – 12:00 noon  
(Refreshments 10:00 – 10:30am)**

**Library, UCI University Club**

801 East Peltason Dr., Irvine, CA 92697

(UCI Map reference H7 and Building #801; free parking in Lot 18B adjacent to the Club)

**Big Data Analytics For Vehicle Quality Improvement**



Dr. Mircea Gradu



Dr. Zekai Akbay



Mr. Tri Nguyen



Mr. Alex Huang

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Hyundai Motor America**

**ABSTRACT**

In the automotive industry, one of the main metrics used to assess vehicle quality is the feedback provided by the owners and buyers of the various models. This feedback is captured through many channels, including structured data such as service, repair, warranty information, and unstructured data coming from surveys, social media (blogs, forums), customer call centers and other sources. This panel presentation will describe some of the Big Data analysis techniques and tools used at Hyundai Motor America to understand customer perceptions related to vehicle quality and based on that, to drive continuous improvements in vehicle design, manufacturing, distribution and service.

**Dr. Mircea Gradu** joined Hyundai Motor America in May 2014 as Director of Engineering and Quality. Dr. Gradu leads the development and implementation of product strategy to improve both the initial quality of Hyundai models and vehicle durability. He has more than 23 years of automotive experience, most recently serving as Vice President and Head of Transmission Powertrain and Driveline Engineering for Chrysler Group LLC. His distinguished career includes being the recipient of the 2008 Edward Cole Award for Automotive Innovation, the 2005 Forest McFarland Award and the SAE-Timken Howard Simpson Innovation Award from the Society of Automotive Engineers (SAE). He holds a Doctorate in Mechanical Engineering from the University of Stuttgart.

**Dr. Zekai Akbay** is Senior Manager of Quality Planning, Data Analysis and Program Management for Hyundai Motor America, and has more than 25 years of automotive engineering experience. His experience includes the design and development of body, chassis, and safety systems as well as advance vehicle engineering, including electric vehicles. He has worked for General Motors, Ford, Chrysler, Daimler, Proterra, and Dassault, and served as an independent consultant to the automotive industry. He holds a Doctorate in Structural Engineering from Wayne State University.

**Mr. Tri Nguyen** is Manager, Quality Planning and Analysis, Hyundai Motor America. He has over 15 years of automotive experience spanning the Parts & Service environment to the Global Quality environment of today. He currently serves as the program manager supporting all 3rd party quality survey vendors such as JD Power & Enprecis, in understanding customer vehicle quality concerns/perceptions and utilizes the survey quality data to launch customer care programs.

**Mr. Alex Huang** is Assistant Manager, Quality Planning & Analysis, Hyundai Motor America. He has over 11 years of automotive experience spanning the dealership environment to the distributor. He currently serves as the analytic lead that supports many of the data-driven initiatives of the Engineering & Quality department.

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