Artificial Intelligence and Its Implications and Opportunities for ALDA Members

May 3-5, 2020
The Mandarin Oriental Hotel
Boston, Massachusetts
Artificial Intelligence, broadly defined as a branch of computer science dealing with the simulation of intelligent behavior in computers, and the capability of a machine to imitate intelligent human behavior, is rapidly becoming a transformative tool for many businesses and organizations.

From better chatbots for customer service to data analytics to making predictive recommendations, artificial intelligence in its many forms is perceived as an essential means to increase operations performance and productivity, and improve informed strategic decision making.

AI also offers great potential to advance medicine and healthcare. In pharma for example, AI is viewed as a resource to improve target and drug discovery, preclinical and clinical development and post-approval activities, significantly increasing drug approval rates and reducing the time and cost of developing new therapeutics. Life science uses include the use of AI and machine learning in complex data analysis applications where researchers take images and try to drive scientific insights by connecting data sets. AI also enables develop better diagnostics and promotes personalized medicine.

Our 2020 Spring Meeting program will offer valuable insights on Artificial Intelligence and its uses, where it is today, how it’s evolving, future prospects, and why AI has important implications and opportunities for members of ALDA and for their customers and users.

Two keynote presentations will complete the Spring Meeting program. On Sunday evening, Chris Voss, a former FBI lead hostage negotiator will present the key takeaways from his book, “Never Split the Difference: Negotiating As If Your Life Depended On It.” Chris’ stories are fascinating and the negotiation techniques are applicable to everyday situations ALDA members deal with.

Michael Porter, the legendary Harvard Business School Professor, will speak on Tuesday morning. Throughout his career, Professor Porter has brought economic theory and strategy concepts to bear on many of the most challenging problems facing corporations, economies and societies, including market competition and company strategy, economic development, the environment, and health care. His work has received many awards and honors and been recognized around the world.
Sunday, May 3, 2020
5:00 PM  Registration
6:00 PM  Reception and Dinner

Never Split the Difference – The Key to Successful Negotiations

Chris Voss
CEO & Founder, The Black Swan Group, Ltd., and Author, of “Never Split the Difference: Negotiating as If Your Life Depended on It”

According to Chris, everything we’ve previously been taught about negotiation is wrong: there is no such thing as ‘fair’, and compromise is the worst thing you can do. The real art of negotiation lies in mastering the intricacies of “no”, not “yes”. These surprising tactics - which radically diverge from conventional negotiating strategies - are the field-tested tools FBI agents use in high-stakes negotiations to talk criminals, terrorists and hostage-takers around the world into (or out of) just about any scenario you can imagine. Chris’ stories are fascinating and entertaining, and the negotiation techniques and insights he will explain are applicable to everyday situations in business, the workplace, and at home.

Monday, May 4, 2020
7:30 AM  Continental Breakfast
9:00 AM  Welcome and Program Introduction

A CEO’s Introduction to AI and Its Business Uses

Andrew McAfee, D.B.A.
Co-Founder and Co-Director, Initiative on the Digital Economy, and Principal Research Scientist
MIT Sloan School of Management

Andrew McAfee is a scientist at MIT. His work investigates how digital technologies are changing the world. Dr. McAfee also is the coauthor, with Erik Brynjolfsson, of the best seller "The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies", which explores how digital technology is transforming our work and lives. Their following book, “Machine | Platform | Crowd: Harnessing our Digital Future”, presents an executive’s guide to succeeding during this turbulent era.

Andrew’s most recent book is "More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources — And What Happens Next" argues that capitalism and technology progress will cause de-materialization to deepen and broaden, and that in a decade America will use fewer resources than today, regardless of population and economic grow.

Dr. McAfee will lead off our examination of AI with an introduction designed to get everyone on the same foundation and vocabulary. Among other things, he will assess where AI is today, what’s real and what’s hype, business uses and AI’s impact on our industry, and conclude with a vision of the future.

10:00 AM  Break

Using AI to Drive Performance and Productivity

Jordi Diaz, Ph.D.
Head of Data Science, North America
QuantumBlack, a McKinsey Company

QuantumBlack, a McKinsey Company, helps companies use data and AI to improve their performance and productivity. They develop and build advanced analytics, machine learning (ML) and AI solutions that solve a wide range of challenging business problems and transform industries from aerospace to automotive, and from healthcare to sports.

In this session, Dr. Diaz, Head of Data Science, North America, will examine QuantumBlack’s work, including how they helped a Formula 1 racing team to improve car development by using data and ML to streamline and improve the R&D process for every element of the car. Other applications include predictive maintenance by improving early failure detection, optimizing customer call centers, organizing and improving decision making in clinical trials, and helping pharma design a molecule in early stage drug discovery. Dr Diaz also will discuss other projects they are engaged in that are very much at the vanguard of ML including the use of deep learning and its applications.

12:00 PM  Luncheon
1:30 PM  Afternoon Program
Doing Better Science in Complex Data Analysis and Drug Discovery

Anne E. Carpenter, Ph.D.
Senior Director, Imaging Platform,
Institute Scientist
Broad Institute of Harvard and MIT

Dr. Carpenter is Senior Director of the Imaging Platform at Broad Institute of MIT and Harvard, where she is also an institute scientist. With a strong background in cell biology, microscopy, and computational biology, her expertise is in developing and applying methods for extracting quantitative information from biological images. Dr. Carpenter directs a team of biologists and computer scientists in developing image analysis and data exploration methods and software that are open source and freely available to the public.

Dr. Carpenter is a pioneer in image-based profiling, the extraction of rich, unbiased information from images for drug discovery, and functional genomics. She collaborates with dozens of biomedical research groups around the world to use image analysis to identify disease states, therapeutic potential, and gene function from microscopy images.

In this session, Dr. Carpenter will describe her laboratory’s work, and explain how her team is using AI and machine learning to advance image analysis and early stage modern drug discovery.

The Use of AI in Diagnostics and Treatment Decisions

Kevin White, Ph.D.
Chief Science Officer
Tempus

Tempus is a technology company making precision medicine a reality through the power and promise of data and Artificial Intelligence. With the world’s largest library of clinical and molecular data, and an operating system to make that data accessible and useful, Tempus’ goal is to enable physicians to make real-time, data-driven diagnostic decisions to deliver personalized patient care and in parallel facilitate discovery, development, and delivery of optimized therapeutic options for patients through distinctive solution sets.

In this session, Dr. Kevin White, Chief Science Officer, will share the Tempus story and describe how Tempus is using AI in to improve diagnosis and make better treatment decisions, and his views and insights on the challenges they face and what products and technologies will be needed from members of ALDA to help them to be successful.

4:00 PM  End of Monday’s Program
6:00 PM  Reception and Dinner

Tuesday, May 5, 2020
7:30 AM  Continental Breakfast

9:00 AM  On Competition

Michael E. Porter, Ph.D.
Bishop William Lawrence University
Professor
Harvard Business School

Professor Michael Porter is an economist, researcher, author, advisor, speaker and teacher. Throughout his career at Harvard Business School, he has brought economic theory and strategy concepts to bear on many of the most challenging problems facing corporations, economies and societies, including market competition and company strategy, economic development, the environment, and health care.

His extensive research is widely recognized in governments, corporations, non-governmental organizations, and academic circles around the globe. His research has received numerous awards, and he is the most cited scholar today in economics and business. While Dr. Porter is, at the core, a scholar, his work has also achieved remarkable acceptance by practitioners across multiple fields.

Dr. Porter’s initial training was in aerospace engineering at Princeton University. He then earned an M.B.A. from Harvard Business School and a Ph.D. in Business Economics from Harvard’s Department of Economics. In 2000, Harvard Business School and Harvard University jointly established the Institute for Strategy & Competitiveness to provide a home for his research.

10:15 AM  Wrap-Up and Adjournment