

Program

5:00 pm Welcome and Introduction
Chris Luebke, Arup Foresight

Pushing the Boundaries of Machine Learning
Ce Zhang, ETH Zurich

How Artificial Intelligence will Help us Explore the Universe
Kevin Schawinski, ETH Zurich

The AI Hype - And Why Humans Need to Become Cyborgs to Stay in the Game
Pascal Kaufmann, StarMind International AG

Smart Analytics for Smart Cities: How Machine Learning on Large Data Sets Helps Cities Make Better Decisions
Georg Polzer, Teralytics

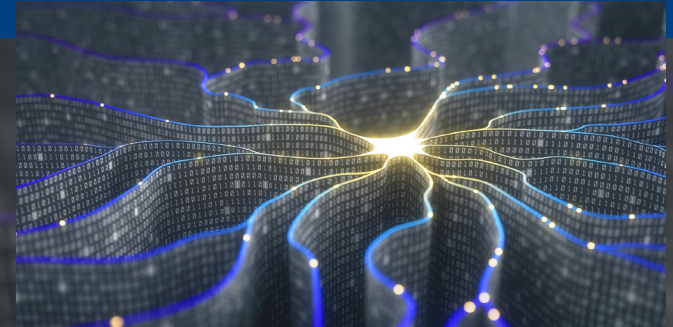
How to Improve the Human Service Experience with ML - Five Lessons Learned
Moritz Mann, Open Systems

Machine Learning at the New York Times
Chris Wiggins, Columbia University and the New York Times

There is No AI Ethics: The Continuum of Natural and Artificial Intelligence, and What it Means for Human Society
Joanna Bryson, University of Bath

What Happened? What's Next? How to Best Embrace Change?
Chris Luebke, Arup Foresight

7:00 pm Networking Reception



The Future is Cognitive

Tuesday, May 16, 2017

5:00 pm
National Sawdust
80 North 6th Street, Brooklyn, NY 11249

Presented by ETH Zurich
in partnership with Greater Zurich Area, Open Systems
and the Swiss-American Chamber of Commerce

The goal of machine learning is to enable computers to learn and excel at performing specific tasks. Examples of these tasks range from driving a car and recognizing a face in a picture, to improving a web search. It has also been argued that, through machine learning, we can get closer to achieving the overarching goal of human-level Artificial Intelligence (AI). In the future, machine learning will play a significant role in many industries and institutions.

This symposium will feature keynote presentations and discussions across a variety of topics at the frontier of machine learning and AI.





Chris Luebke’s interest in the built environment propelling him to pursue a multi-faceted education, beginning with engineering and culminating in a Doctorate in Architecture from ETH in Zurich, a city to which he remains deeply connected. Chris gained valuable experience as the protégé of esteemed Spanish Architect, Santiago Calatrava. He subsequently turned to his other love, education, by accepting teaching positions at several prestigious universities. In 1999, Chris joined Arup as the co-Director for Research and Development. A couple of years later, he formed the Foresight, Innovation and Incubation team, which has evolved into its present form as Research + Foresight + Innovation.



Ce Zhang is an Assistant Professor in Computer Science at ETH Zürich. His current research focuses on building data systems to support machine learning and help facilitate other sciences. Before joining ETH, Ce was advised by Christopher Ré. He finished his PhD round-tripping between the University of Wisconsin-Madison and Stanford University, and spent another year as a postdoctoral researcher at Stanford. His PhD work produced DeepDive, a trained data system for automatic knowledge-base construction. He participated in the research efforts that won the SIGMOD Best Paper Award (2014) and SIGMOD Research Highlight Award (2015), and was featured in special issues including “Best of VLDB” (2015), and the Nature magazine (2015).



Kevin Schawinski is a Professor of Galaxy and Black Hole Astrophysics at ETH Zurich and the co-founder of the Galaxy Zoo online citizen science project that has engaged over a million people in scientific research. His research focuses on the impact of the energy released by black hole growth on the formation and evolution of galaxies and discovering the ultimate origin of supermassive black holes in the Universe. After completing his D.Phil in three years at Oxford University, for which he won the Royal Astronomical Society’s thesis prize, he moved to Yale University and won a NASA Einstein Fellowship.



Pascal Kaufmann is a technology entrepreneur who pushes the limits of the unknown. As a neuroscience graduate from the ETH Zurich, he researched the interface between living brains and robots at the medical school of Northwestern University. His vision “to think with the power of 1’000 brains” - gave rise to the concept of Corporate Brains with self-learning algorithms - opening a new field called “Brain Technology”. He is now the fearless leader of StarMind.



Georg Polzer is co-founder and CEO of Teralytics. He started the company in 2012 after graduating from ETH Zurich in Computer Science. Since then, Teralytics has grown into the leading providers of telecom data monetization solutions. Leveraging advanced analytics capabilities, Teralytics turns telecom network signal data into anonymized profiles of human behavior, interests and intents. The profiles are provided to city planners, insurance companies, hedge funds and advertisers. Teralytics has offices in Zurich, New York, and Singapore.



Moritz Mann studied at the Dualen Technical College Baden-Württemberg in Lörrach, Germany. He holds a degree in Information Systems. He also earned a business degree from Open University in Milton Keynes, UK. After finishing his studies, Moritz Man joined Open Systems AG directly. In 2012, He accepted the responsibility for Mission Control Operations in Zurich and Sydney, after having worked in different roles in Development, Professional Services and Consulting.



Chris Wiggins is an Associate Professor of Applied Mathematics at Columbia University and the Chief Data Scientist at The New York Times. At Columbia he is a founding member of the executive committee of the Data Science Institute, and of the Department of Systems Biology, and is affiliated faculty in Statistics. He is a co-founder and co-organizer of the non-profit hackNY (<http://hackNY.org>). Prior to joining the faculty at Columbia he was a Courant Instructor at NYU and earned his PhD at Princeton University in theoretical physics. He is a Fellow of the American Physical Society and is a recipient of Columbia’s Avaneessians Diversity Award.



Joanna Bryson is a transdisciplinary researcher on the structure and dynamics of human- and animal-like intelligence. Her research covers topics ranging from artificial intelligence to autonomy and robot ethics to human cooperation. She holds degrees in Psychology from Chicago and Edinburgh, a MSc in Artificial Intelligence from Edinburgh, and a ScD from MIT. She has additional professional research experience from Oxford, Harvard, and LEGO. She also has technical experience in Chicago’s financial industry and international organization management consultancy. Bryson is presently a Reader (Associate Professor) at the University of Bath, and an affiliate of Princeton’s Center for Information Technology Policy.