DATA SCIENCE UA

9th Data Science UA Conference

Agenda

Sixth Avenue 28th - 36th September 25th, 2017

Date	Start	End	Business track	Technical track	Workshops track
			Breakfast		
25.9	9:00	9:10	**Calina Velichova** Welcome	**Dr. Sergei Romanenko** Welcome	
	9:10	9:40	**Dmitry Ustalov** Making API Kill Data in Java Machine Learning Projects: A Journey of a Thousand Miles	**Oleg Lepenioti** Deep Learning Anomaly Detection	
	9:40	10:10	**Dr. Sergei Romanenko** Data Science Automation: Recent Advances and Future Perspectives Data Science Automation (DSA) is a set of methods that allow automating some of the routine tasks in data science projects. Automation of data science tasks is important because it increases the productivity of data scientists and makes data science more accessible to non-experts. In this talk, we will review the state of the art in DSA, including automated machine learning (AutoML), automated feature engineering (AFE), automated exploratory data analysis (AutoEDA), automated time series analysis, automated text analytics, automated image analysis and automated data visualization. We will discuss DSA in combination of different machine learning tasks, such as: - Supervised learning - Unsupervised learning - Reinforcement learning - Semi-supervised learning - Active learning - Transfer learning - Multi-task learning - Multi-agent learning - Ensembling, and - Combinations of the above. We will discuss how a combination of different machine learning tasks can be automated in a single system.		
	10:10	10:40	**Kristoffer Jacobsen Chacon** Coffee break	**Yanet Rosa Hernandez** Coffee break	
25.9	10:40	11:10	**Grassmann and Associates, Dr. Phil. Ralfang Marc Hanmann** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	**Dr. Sergei Romanenko** Data Science Automation: Recent Advances and Future Perspectives Data Science Automation (DSA) is a set of methods that allow automating some of the routine tasks in data science projects. Automation of data science tasks is important because it increases the productivity of data scientists and makes data science more accessible to non-experts. In this talk, we will review the state of the art in DSA, including automated machine learning (AutoML), automated feature engineering (AFE), automated exploratory data analysis (AutoEDA), automated time series analysis, automated text analytics, automated image analysis and automated data visualization. We will discuss DSA in combination of different machine learning tasks, such as: - Supervised learning - Unsupervised learning - Reinforcement learning - Semi-supervised learning - Active learning - Transfer learning - Multi-task learning - Multi-agent learning - Ensembling, and - Combinations of the above. We will discuss how a combination of different machine learning tasks can be automated in a single system.	
	11:40	12:10	**Steven Rudlow** Data Science and Analytics for Business Decision Making Data Science and Analytics are now a critical component of business decision making. Data Science and Analytics can be used to improve business performance, customer experience, business processes, and business strategy. Data Science and Analytics can be used to provide real time, or near real time, information to support business decision making. This presentation will provide an overview of the use of Data Science and Analytics in business decision making. It will also provide a brief overview of the use of Data Science and Analytics in business decision making in the following industries: Retail, Financial Services, Healthcare, Manufacturing, Transportation, Telecommunications, Energy, Government, Education, Sports, Entertainment, Agriculture, and Science.	**Oliver Mason** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	**Eugene Khandchuk** Coffee break
25.9	12:10	12:40	**Dmitry Ustalov** Coffee break	**Oleg Lepenioti** Coffee break	
	12:40	13:10	**Dmitry Ustalov** Data science and business intelligence consultancy and when you don't	**Oleg Lepenioti, Jean Gomes** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	
	13:10	13:40	**Yanet Lantzin Schwartzman** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	**Jill Leporte** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	**Steven Rudlow** Data Science and Analytics for Business Decision Making Data Science and Analytics are now a critical component of business decision making. Data Science and Analytics can be used to improve business performance, customer experience, business processes, and business strategy. Data Science and Analytics can be used to provide real time, or near real time, information to support business decision making. This presentation will provide an overview of the use of Data Science and Analytics in business decision making. It will also provide a brief overview of the use of Data Science and Analytics in business decision making in the following industries: Retail, Financial Services, Healthcare, Manufacturing, Transportation, Telecommunications, Energy, Government, Education, Sports, Entertainment, Agriculture, and Science.
25.9	13:40	14:10	**Dr. Sergei Romanenko** Data Science Ethics - Ethical issues in data collection and analysis - Discrimination and profiling by algorithms - Data ownership - Data security - Data quality - Data science and the law - Data science and the public sphere	**Jill Leporte** Reinforcement learning: Theory and Practical Applications Reinforcement learning (RL) is a powerful paradigm for sequential decision-making under uncertainty and lies at the intersection of many disciplines, including stochastic optimal control, operations research, and reinforcement learning. Recent advances in RL have led to impressive results in a variety of challenging domains, including robotics, autonomous driving, and the game of Go. In this talk, we will review the foundations of RL, and discuss some of the challenges that it faces in practical applications. We will also review the hottest trends in reinforcement learning, such as: Deep Reinforcement Learning, Hierarchical Reinforcement Learning, Multi-agent Reinforcement Learning, Inverse Reinforcement Learning, Imitation Learning, Learning to Learn, Learning to Plan, Bayesian Reinforcement Learning, Safe Reinforcement Learning, Exploration in Reinforcement Learning, Reinforcement Learning with Partial Observability, Reinforcement Learning with Continuous Actions, Reinforcement Learning with Continuous Rewards, Reinforcement Learning with Sparse Rewards, Reinforcement Learning with Delayed Rewards, Reinforcement Learning with Non-Markovian Rewards, Reinforcement Learning with Non-Stationary Rewards, Reinforcement Learning with Non-Differentiable Rewards, Reinforcement Learning with Non-Differentiable Constraints, Reinforcement Learning with Non-Differentiable Objectives, Reinforcement Learning with Non-Differentiable Dynamics, Reinforcement Learning with Non-Differentiable Observations, Reinforcement Learning with Non-Differentiable Actions