

Machine Learning Summer School 2019 Schedule

Week 1: August 26 – August 30

	MON/26	TUE/27	WED/28	THU/29	FRI/30
09:00	Opening Remarks	09:00 – 10:30 Marco Cuturi Optimal Transport	09:00 – 10:30 Arthur Gretton Kernels	09:00 – 10:30 Arthur Gretton Kernels	09:00 – 10:30 Arthur Gretton Kernels
09:10	09:10 – 10:00 Sergei Kravchenko AI and Analytics in Aerospace				
10:00	10:00 – 10:30 Marco Cuturi Optimal Transport				
10:30	10:30 – 11:00 Coffee				
11:00	11:00 – 12:30 Marco Cuturi Optimal Transport	11:00 – 12:30 Justin Solomon Geometric Techniques in ML	11:00 – 12:30 Yarin Gal Bayesian Deep Learning	11:00 – 12:30 Joris Mooij Causality	11:00 – 12:30 Joris Mooij Causality
12:30	12:30 – 12:35 Break				
12:35	12:35 – 13:20 Marco Cuturi Optimal Transport	12:35 – 13:20 Matus Jan Telgarsky Deep Learning Theory	12:35 – 13:20 Matus Jan Telgarsky Deep Learning Theory	12:35 – 13:20 Arthur Gretton Kernels <i>Tutorial</i>	12:35 – 13:20 Joris Mooij Causality <i>Tutorial</i>
13:20	13:20 – 14:30 Lunch				
14:30	14:30 – 15:15 Marco Cuturi Optimal Transport <i>Tutorial</i>	14:30 – 15:15 Matus Jan Telgarsky Deep Learning Theory	14:30 – 15:15 Matus Jan Telgarsky Deep Learning Theory	14:30 – 15:15 Arthur Gretton Kernels <i>Tutorial</i>	14:30 – 15:15 Joris Mooij Causality <i>Tutorial</i>
15:15	15:15 – 15:30 Break				
15:30	15:30 – 17:00 Marco Cuturi Optimal Transport <i>Tutorial</i>	15:30 – 17:00 Justin Solomon Geometric Techniques in ML <i>Tutorial</i>	15:30 – 17:00 Justin Solomon Geometric Techniques in ML	15:30 – 17:00 Yarin Gal Bayesian Deep Learning	15:30 – 17:00 Yarin Gal Bayesian Deep Learning <i>Tutorial</i>
17:00	17:00 – 17:30 Coffee				
17:30	17:30 – 19:00 Justin Solomon Geometric Techniques in ML	17:30 – 19:00 Michael Bronstein Graph Neural Networks	17:30 – 19:00 Michael Bronstein Graph Neural Networks	17:30 – 19:00 Nicolò Cesa-Bianchi Online Learning	17:30 – 19:00 Nicolò Cesa-Bianchi Online Learning
19:00	19:00 Welcome cocktail			19:00 Discussion Panel	

Community Day

Saturday, August 31

SAT/31 COMMUNITY DAY			
	ROOM E-R2-B4- 2018	ROOM E-R2-B3-2019	ROOMS E-B2- 3006 & E-B2-3007
09:30	Registration		
10:00	Danila Doroshin AI Renaissance in Telecom		
10:30	Yarin Gal Machine Learning in Space		Gonzalo Ferrer Planning Networks for Dynamic Robot Navigation
11:00	Arthur Gretton Kernels for Representing and Testing Probability Distributions	Efim Boeru Predictive Analytics and Maintenance of Optical Networks	
11:30		Irina Basieva Transmission Rate Reinforcement Learning	Viktor Lempitsky Towards Photorealistic Telepresence
12:00	Yarin Gal, Arthur Gretton, Michael Besserve, William Clements (ROOM E-R2-B4-2018) Machine Learning as Fuel for Telecom		
12:30	Lunch brought by Huawei		
13:30	Michel Besserve, Dmitry Lakontsev, Irina Fedulova, Dmitry Ovchinnikov (ROOM E-R2-B4-2018) Machine Learning is the Next Breakthrough in Healthcare?		Evgeny Burnaev Deep Latent Convolutional Models for 3D Computer Vision
14:30	Alexander Lvovsky Machine learning and quantum technology: where Bellman's equations meet Bell's inequalities.	Ivan Smurov Advances in Natural Language Processing <i>Tutorial</i>	Best abstract ceremony by Philips Talks of the winners devoted to the use of Machine Learning in healthcare
15:30	Lingxi Xie Neural Architecture Search		
16:00		Danila Doroshin Sparse Deep Networks for Pre-distortion	Ivan Oseledets A Potpourri Made of Machine Learning and Modelling
17:00	Coffee Break brought by Huawei		
17:30	Michael Boguslavsky Machine Learning for Financial Risk Modelling	William Clements Reinforcement Learning and Quantum Computing	Dmitry Yarotsky Mysteries of Deep Neural Networks: Phase Transitions and Nonstandard Computational Models
18:30	Poster session brought by Yandex		Andrey Somov Wanna Play a Game? Towards Data Collection and Processing in eSports
20:00	Transfer to the hotel		

Week 2: September 2 – September 6

	MON/02	TUE/03	WED/04	THU/05	FRI/06
09:00	9:00 – 10:30 Michel Besserve ML and Neuroscience	9:00 – 10:30 Michel Besserve ML and Neuroscience	9:00 – 10:30 Ulrich Bauer Topological Data Analysis	9:00 – 10:30 Ulrich Bauer Topological Data Analysis	9:00 – 10:30 Mark Girolami Probabilistic Numerics
10:30	10:30 – 11:00 Coffee				
11:00	11:00 – 12:30 Isabel Valera Fairness & Interpretability	11:00 – 12:30 Isabel Valera Fairness & Interpretability	11:00 – 12:30 Shimon Whiteson Reinforcement Learning	11:00 – 12:30 François Bachoc Advances in Gaussian Process	11:00 – 12:30 François Bachoc Advances in Gaussian Process
12:30	12:30 – 12:35 Break				
12:35	12:35 – 13:20 Shimon Whiteson Reinforcement Learning	12:35 – 13:20 Shimon Whiteson Reinforcement Learning	12:35 – 13:20 Ulrich Bauer Topological Data Analysis <i>Tutorial</i>	12:35 – 13:20 Ulrich Bauer Topological Data Analysis <i>Tutorial</i>	12:35 – 13:20 Leonid Zhukov Modelling with virtual sensors
13:20	13:20 – 14:30 Lunch				
14:30	14:30 – 15:15 Michael Bronstein Graph Neural Networks <i>Tutorial</i>	14:30 – 15:15 Shimon Whiteson Reinforcement Learning <i>Tutorial</i>	14:30 – 15:15 Michael Bronstein Graph Neural Networks <i>Tutorial</i>	14:30 – 15:15 Shimon Whiteson Reinforcement Learning <i>Tutorial</i>	14:30 – 15:15 Shimon Whiteson Reinforcement Learning <i>Tutorial</i>
15:15	15:15 – 15:30 Break				
15:30	15:30 – 17:00 Matus Jan Telgarsky Deep Learning Theory <i>Tutorial</i>	15:30 – 17:00 Shimon Whiteson Reinforcement Learning	15:30 – 17:00 Michael Bronstein Graph Neural Networks <i>Tutorial</i>	15:30 – 17:00 Mark Girolami Probabilistic Numeric	15:30 – 17:00 Mark Girolami Probabilistic Numerics <i>Tutorial</i>
17:00	17:00 – 17:30 Coffee				
17:30	17:30 – 19:00 Shimon Whiteson Reinforcement Learning	17:30 – 19:00 Justin Solomon Geometric Techniques in ML <i>Tutorial</i>	17:30 – 19:00 Mark Girolami Probabilistic Numerics	17:30 – 19:00 Poster Session brought by Yandex	17:30 – 19:00 Evgeny Burnaev Deep Bayesian Generative Models for Knowledge Transfer and MRI Processing
19:00			19:00 Discussion Panel	19:00 Farewell dinner	