Russian Research Institute
Nizhny Novgorod Research Center

Workshop

Fundamental and Applied Problems of Machine Learning

18-20th of December 2019 // Nizhny Novgorod, Russia
Parkhotel "Kulibin",
121 Gorky Str., Nizhny Novgorod, 603006, Russia

Event program

Time slot	Subject	Speaker Name	Affiliation	Topic
Day #1: December 18, 2019				
9.00 – 9.30	Coffee & Registration			
9.30 – 9.35	Welcome	Xin Zhang	Huawei Nizhny Novgorod Research Center	Welcome Speech
9.35 – 9.40	Introduction	Sergey Tiraspolsky	Huawei Nizhny Novgorod Research Center	Introduction to NNRC
9.40 – 10.20	Neural Networks & Models	Joongheon Kim	Korea University	Deep Reinforcement Learning Research and Its Applications to Networks
10.20 – 11.00		Evgeny Burnayev	Skoltech	Deep generative models for knowledge transfer
11.00 – 11.20	Coffee break & snacks			
11.20 – 12.00	Autonomous Driving & Smart Cities	Andrey Kuznetsov	Samara National Research University	State-of-the-art methods for car make and model classification
12.00 – 12.40		Yaroslav Kholodov	Innopolis University	Bayesian framework for vehicle localization using crowdsourced data
12.40 – 13.40	Lunch			
13.40 – 14.20	Neural Networks, Machine Learning & Big Data	Alexander Gorban	University of Leicester, Lobachevsky UNN	Ecosystems and Social Networks of Neural Network Intelligence
14.20 – 15.00		Ivan Tyukin	University of Leicester	Learning at the edge
15.00 – 15.40		Alexander Gasnikov	MIPT	Decentralized distributed algorithms for huge-scale data science problems.
15.40 – 16.00	Coffee break & snacks			
16.00 – 16.40	Neural Networks, Machine Learning and Big Data	Anna Petrovicheva	Xperience.ai	Processes and good practices in DL model development
16.40 – 17.20		Evgeny Golikov	MIPT	Why do neural nets learn and generalize?
17.20 – 18.00		Sergey Kuznetsov	HSE Moscow	Knowledge Discovery in Data with Complex Structure
18.20 – 18.00	Wrap-up section	Q&A, open discussion		
19.00 – 22.00	Banquet	Restaurant "De Kas" at Parkhotel "Kulibin"		

Time slot	Subject	Speaker Name	Affiliation	Topic
Day #2 December 19, 2019				
9.00 – 9.30	Coffee			
9.30 – 10.10	Media Processing & CV	Andrey Savchenko	HSE Nizhny Novgorod	Offline analysis and recognition of photos in a gallery on mobile devices
10.10 – 10.50		Alexey Fadeev	ViCue Soft	Machine Learning Type of Content Detection for Dynamic Ad Insertion (DAI) in the absence of SCTE-35/104 tags
10.50 – 11.10	Coffee break & snacks			
11.10 – 11.50	Media Processing & CV	Ilya Lysenkov	Lobachevsky UNN, Itseez3D	The problem of 3D reconstruction of people and approaches to its solution
11.50 – 12.30		Valentina Kustikova	Lobachevsky UNN	DLI: Deep Learning Inference Benchmark
12:30 – 13.10		Pavel Yakimov	Samara National Research University	Machine Learning-based Approaches for Imaging with Flat Diffractive Optics
13.10 – 14.10	Lunch			
14.10 – 14.50	NLP & ASR	Alexey Sorokin	MIPT	Adapting BERT to different tasks and languages
14.50 – 15.30		Su Shen	Magic Data Technology	Text design and application for ASR
15.30 – 16.10		Sergey Markov	Sberbank	Call Center Robot Operator
16.10 – 16.30	Coffee break & snacks			
16.30 – 17.10	NLP & ASR	Nikolay Karpov	Sberbank	Audio data augmentation for ASR and keyword spotting
17.10 – 17:50		Igor Basko	Fonemica	NLP today and tomorrow: challenges, application, trends
17.50 – 18.30	Autonomous Driving & Smart Cities	Dmitry Chikrin	Kazan Federal University	Machine learning-based dynamic road scene and road actors estimation.
18.30 – 19.00	Wrap-up section	Closing Ceremony, Awarding Participants		
19:00	Dinner			

Time slot	Subject	Speaker Name	Affiliation	Topic
Day #3 December 20, 2019				
9.00 – 18:00	Excursion Trip to Chkalovsk: • The excursion starts at the tourism center «Russian wings». The program of excursion includes sapid game elements and unexpected techniques. The remarkable fact is that tourists are welcomed there by stuff of the museum dressed in pilots and stewardesses uniform. «Hostesses» of the «high-speed liner» are inviting to take a «flight-trip» on the board of «airship». During the «sightseeing flight» they introduce to the tourists a rear collection consists of ancient airplanes (by one of them famous Russian pilot Valery Chkalov made his incredible flight from Moscow to the Vancouver through North Pole without landing) and a car which was given him by leader of the USSR Joseph Stalin. • The excursion continues in the Valery Chkalov Museum – an ancient house where he was born and spent his childhood and youth. The display of the exhibition contains the very little detail of his life in this house. • After that the excursion tour wends its way to the famous by an ancient church village Katunki which situated on the beautiful bank of the Volga River. There tourist have a show tour around the church and a master class of bell-ringing on the bell-tower. • In the final of the excursion tour the tourists have a lunch on the open air were the main dish is fish soup which made from just caught fresh fish. **This is preliminary program of sightseeing trip and will be fixed later**			