

## Huawei AI Enabled Multi-Media Technologies

*Media Algorithm Laboratory, MRC*

### **Technical Program for Day 1st, May 30th**

Time		Duration
8:30	<b>Registration and Coffee</b>	hh/mm
9:00	<b>Workshop opening</b>	0:10
9:10	<b>Welcome speech from President</b>	0:15
9:25	<b>Session - Color and Image Processing</b>	0:10
9:35	<b>AI-based color constancy</b> Simone BIANCO, Assistant Professor in Computer Science at Department of Informatics, Systems and Communication of University of Milan-Bicocca, Milan, Italy	0:40
10:15	<b>Methods of color spaces recalculation in tasks of color correction, color calibration and color transferring</b> Nataliia OBUKHOVA Dr.Sc, Professor at Television and video equipment department of St. Petersburg Electrotechnical University "LETI", St. Petersburg, Russia	0:40
10:55	<b>Coffe Break</b>	0:20
11:15	<b>Fast Statistical Image Recognition with Medium-sized Databases</b> Andrey SAVCHENKO, PhD, Dr.Sc, High School of Economics, Nizhny Novgorod, Russia	0:40
11:55	<b>Problem of parameters estimation for image denoising methods</b> Andrey KRYLOV Dr.Sc., Professor at CMC, MSU, Moscow, Russia	0:40
12:35	<b>Lunch</b>	1:10
13:45	<b>2D image fusion</b> Nickolay PENKRAT Senior Researcher at Research and Development Center of St.Petersburg State University, St.Petersburg, Russia	0:40
14:25	<b>Image appearance phenomena in optimization of display performance</b> Anton GRIGORYEV, Researcher at Vision Systems Laboratory of Institute of Information Transmission Problems, Moscow, Russia	0:40
15:05	<b>Coffe Break</b>	0:20
15:35	<b>Volumetric Medical Image Segmentation with Deep Convolutional Neural Networks</b> Ivan SHANIN, Researcher at Federal Research Center "Computer Science and Control" or Russian Academy of Science, Moscow, Russia	0:40
15:25	<b>Session - Voice and Speech Processing</b>	0:10
16:15	<b>Voice Recognition: technologies, trends, challenges</b> Ilya MAKAROV, PhD, Integrated Biometrical Solutions & Systems, LLC (IBRiS, LLC)	0:40
16:55	<b>Application of the empirical mode decomposition technology for speech signal processing</b> Alan ALIMURADOV, PhD in Computer Science of Penza State University, Penza, Russia	0:40
17:35	<b>Free Discussions</b>	0:25
18:00	<b>Dinner on board</b>	

**Huawei AI Enabled Multi-Media Technologies**  
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**Technical Program for Day 2nd, May 31th**

Time		Duration
8:30	<b>Registration and Coffee</b>	hh/mm
9:00	<b>Session - 3D Reconstruction &amp; Depth Map</b>	0:10
9:10	<b>3D Reconstruction of the Underlying Surface from the Sequence of the Stereo Pairs</b> Victoria SABLINA, PhD, Docent of the Electronic Computers Department of Ryazan State Radio Engineering University, Ryazan, Russia.	0:40
9:50	<b>Non-rigid object (people) 3D reconstruction</b> Dmitry KORCHEMKIN, Researcher at Research and Development Center of St. Petersburg State University, St. Petersburg, Russia	0:40
10:30	<b>The use of Dual Pixel sensor in the task of calculating the depth map</b> Yevgeniy MURATOV, PhD, Docent of the Electronic Computers Department of Ryazan State Radio Engineering University, Ryazan, Russia.	0:40
11:10	<b>Coffe Break</b>	0:20
11:30	<b>Session - Sensors</b>	0:10
11:40	<b>Multi-Modal Sensors for Human Behavior Monitoring</b> Paolo NAPOLETANO, Assistant Professor of Computer Science at Department of Informatics, Systems and Communication of University of Milan-Bicocca, Milan, Italy	0:40
12:20	<b>Stochastic Programming and Multiagent Technology</b> Oleg GRANICHIN, Professor of Computer science at Department of Mathematics and Mechanics of St. Petersburg State University, St. Petersburg, Russia	0:40
13:00	<b>Lunch</b>	1:10
14:10	<b>Session - Applied Optics</b>	0:10
14:20	<b>Development of compact zoom lenses</b> Alexander SHIRANKOV, PhD, Bauman Moscow State Technical University, Moscow, Russia	0:40
15:00	<b>Development of cameras with increased depth of field</b> Alexander SHIRANKOV, PhD, Bauman Moscow State Technical University, Moscow, Russia	0:40
15:40	<b>Coffe Break</b>	0:20
16:00	<b>Session - AI</b>	0:10
16:10	<b>On adversarial attacks and GAN evaluation techniques</b> Valentin KHRULKOV, PhD-Student, Researcher, Scoltech, Moscow, Russia	0:40
16:50	<b>Challenges of hierarchical reinforcement learning</b> Alexey SKRYNNIK, PhD student of FRC CSC RAS, Laboratory of Cognitive dynamic systems, Moscow Institute of Physics and Technology, Moscow, Russia	0:40
17:30	<b>Workshop Closing</b>	0:30
18:00	<b>Dinner</b>	