RUSSIAN-FRENCH WORKSHOP
IN BIG DATA & APPLICATIONS

12th - 13th October 2017, HSE, Moscow

Co-organised by Institut Mines-Télécom,
& National Research University Higher School of Economics (HSE),
in association with Ambassade de France in Russia,
Ministère de l’Enseignement supérieur, de la Recherche et de l’Innovation,
Hub French Tech Moscow, INRIA & GDR CNRS MADICS

October 12th
HSE, 20 Myasnitskaya str.¹, room 311
9:00-9:15 - Registration
9:15-9:45 - Opening session
Aurelien Leynet (Ambassade de France en Russie, FR), Boris Zhelezov (HSE, RF), Florence d’Alché, Pierre Simay (Inst. Mines-Télécom / Télécom ParisTech, FR)

Group-photo

9:45-11:45 - Session 1 - A Scope of Big Data
Chair: Peter Golubtsov (Lomonosov Moscow State Univ., RF)
Hervé Glotin (Univ. Toulon / LSIS, EADM MADICS, FR)

Marion Poupard (Univ. Toulon / LSIS, EADM MADICS, FR)
Bioacoustic Big Data & Long Term Monitoring of Marine Mammals from Toulon to Baikhal.

Olga Gorchinskaya (FORS Group, RF)
Big Data & Wearable Devices for Parkinson’s disease.

¹ see the map on the last page
Vladimir Efimushkin (Central Science Research Telecom. Inst., RF)
Big Data in Software Defined Network.

Peter Golubtsov (Lomonosov Moscow State Univ., RF)
Specific Features of Big Data Processing & the Concept of Information.

Mikhail Posypkin (Federal Research Center «Computer Science and Control» of RAS, RF)
Large-scale Crowd Computing.

11:45-12:15 – Break

12:15-14:15 - Session 2 - Methods & Tools for Big Data (1/2)
Chair: Sergey Petropavlovskiy (HSE, RF)

Stéphan Clémençon (Télécom ParisTech / Inst. Mines-Télécom, FR)
Methods for the Detection of Anomalies & Weak Signals.

Aurélien Bellet (INRIA, FR)
Decentralized Collaborative Machine Learning over Networks.

Smart Big Data Infrastructures for Domain-Specific Problems: Concept & Applications.

Florence d'Alché (Télécom ParisTech / Inst. Mines-Télécom, FR)
Efficient Complex Output Prediction.

Cédric du Mouza (CNAM, FR)
Scalable Graph Algorithms.

Dmitry Vetrov (HSE, RF)

14:15 -15:00 - Lunch

15:00 – 17:00 - Session 3 - Methods & Tools for Big Data (2/2)
Chair: Sergei Kuznetsov (HSE, RF)

Boris Mirkin, M. Tokmakov (HSE, RF), V. Makarenkov (Univ. Quebec, CA), R. Amorim (Univ. Essex, UK)
Capturing Number of Clusters in K-means with Equivalent Criterion, Affinity propagation & Ward agglomeration.

Sergei Nechaev (Interdisciplinary Scientific Cent. Poncelet, RF)
Collective Effects in Random Graphs & Social Behavior beyond the Schelling Model.

Pavel Sulimov, A. Kertesz-Farkas (HSE, RF)
High-dimensional Generative Probabilistic Models for Peptide-spectrum matching in Tandem Mass Spectrometry

Antoine Chambille (ActiveViam, FR)
In-Memory Computing to Make the Business Faster.
Tatiana Makhalova, S. Kuznetsov (HSE, RF)
Rule-Based Classification Approach: Closed Item Sets vs Random Forests

Nataliia Bielova (INRIA Sophia-Antipolis, FR)
Tracking, Profiling & Discriminating users on the Web.

**18:00 - Reception at the French Embassy**
The residence of the French Ambassador to Russia, 43 Bolshaya Yakimanka Street (Igumnov House), by personal invitation

October 13th
20 Myasnitskaya str., room 102

**9:00-10:15 - Session 4 - The Impact of Big Data (1/2)**
Chair: Petr Panfilov (HSE, RF)

Yury Maximov (Skolkovo Inst. of Science & Tech., RF)
Rademacher Complexity Bounds for a Penalized Multiclass Semi-Supervised Algorithm.

Anne-Sophie Taillandier (Teralab / Inst. Mines-Télécom, FR)
Secure Cloud Platform.

Is the Current Sea Level Rise Unprecedented?

Evgeny Burnaev (Skolkovo Inst. of Science & Tech. / IITP RAS / HSE, RF)
Machine Learning in Industrial Analytics.

Vladimir Korkhov (St. Petersburg State Univ., RF)
Distributed Collection, Processing & Analysis of Sensor Data.

**10:15-10:30 - Break**

**10:30-12:00 - Session 5 - The Impact of Big Data (2/2)**
Chair: Petr Panfilov (HSE, RF)

F. Aleskerov, Natalia Meshcheryakova, S. Shvydun (HSE, RF)
Simplification of Large Networks.

Mikhail Parfentev (Analytical Center for the Government of RF, RF)
Open Data in the Era of Digital Economy.

Dilara Khannanova (FactSet SARL, RF)
Big Data goes smart: Data Challenges in Financial Industry.

Elizaveta Prokofyeva, S. Maltseva (HSE, RF)
Modeling Demand for Services in the Healthcare Facilities Using Big Data Techniques.
Ilya Kuzminov (HSE, RF)
Applications of Text Mining and Semantic Analysis to Foresight Studies.

Denis Ismagilov (Innopolis Special Economic Zone, RF), Joo Young Lee (Innopolis Univ., RF)
Support Measures for Projects of Russian High-Tech Companies by the Example of Innopolis Special Economic Zone. Innopolis University and Big Data Research.

12:00-13:00 - Session 6 - European & int. calls for grants on Big Data
Loïc Charlot, Maxime Baconnet (Ambassade de France en Russie, FR)
Maria Putseleva (EEAS-Moscow)

The objective of the session is to give an overview of the funding landscape for Big Data under the Horizon 2020 program (European Commission), as well as presenting other programs for research and innovation cooperation between EU/France and Russia. The session will also introduce bilateral tools/programmes to support mobility and Phd students and researchers between Russia and France.

13:00-14:00 – Lunch

14:00-17:00 - Session 7 - Big Data in Retailing
Chair: Arnaud Troussset (Retail Intelligence Location Solutions, FR)
Antoine Chambille (ActiveViam, FR)
Demonstration: In-Memory Analytics - Operating a real-time Control Tower for a Global Retailer.

Arnaud Troussset (Retail Intelligence Location Solutions, FR)
The use of Big Data to Optimize the Process of Expansion for Retail Industry.

Jérôme Baray (Univ. Paris XII, FR)
Big Data for Optimizing Business Strategies in Retail Industry.

Il'ya Gubarev (Yandex, RF)
How to Know your Customer Better?

Marina Kholod (Plekhanov Russian Univ. of Economics, RF)
Application of POS & RFID-data Analytics for Retail Management.

Dmitry Shostko (MTS, RF)
Data Monetization in Retail & Telecom area through Big Data IT Platform.

Anastasia Grigoreva (X5 Retail Group, RF)
Machine Learning and Expertise - the Key to Success of Targeted Marketing.

16:00-17:00 - Panel session

17:00-17:30 - General Closing session
Logistics

Maysnitskaya street, 20 - How to get there?

- Metro station «Lubyanka»:
  Exit to Myasnitskaya Ulitsa, which you should follow. The destination will be on your right. Estimated travel time: 8 minutes.

- Metro stations «Chistiye Prudy», «Sretensky Bulvar» and «Turgenevskaya»:
  Exit to Myasnitskaya Ulitsa, which you should follow towards the city center. The destination will be on your left. Estimated travel time: 7 minutes.

- Metro station «Kitay-Gorod»:
  Exit to Maroseyka Ulitsa, which you should follow for 100 meters, then turn right onto Bolshoy Zlatoustinskiy Pereulok (350 meters), and then bear right onto Myasnitskaya Ulitsa, which you should follow for 150 meters. The destination will be on your right. Estimated travel time: 10 minutes.

Google Maps
https://goo.gl/maps/WH7Li8uRXam

Yandex Maps
https://yandex.ru/maps/-/CVhKbELT