Preface

The 9th Russian Summer School in Information Retrieval (RuSSIR 2015) was held during August 24–28, 2015, in St. Petersburg, Russia. The school was co-organized by the National Research University Higher School of Economics and the Russian Information Retrieval Evaluation Seminar (ROMIP).

The RuSSIR school series started in 2007 and has developed into a renowned academic event with extensive international participation. Previously, RuSSIR took place in Yekaterinburg, Taganrog, Petrozavodsk, Voronezh, St. Petersburg, Yaroslavl, Kazan, and Nizhny Novgorod. RuSSIR courses were taught by many prominent International Researchers in Information Retrieval and Related Areas.

The RuSSIR 2015 program featured courses focusing on social network analysis and graph mining along with traditional Information Retrieval topics. The program consisted of two invited lectures, eight courses running in two parallel sessions, three sponsor’s talks, and the RuSSIR 2015 Young Scientist Conference.

The school welcomed 134 participants selected based on their applications. The majority of students came from Russia, but there were also 15 students from Europe and seven from the rest of the world. The RuSSIR audience comprised undergraduate, graduate, and doctoral students, as well as young academics and industrial developers. In total, 169 people participated including students, sponsor representatives, lecturers, and organizers.

The participation was free of charge thanks to the sponsors. In addition, 20 accommodation grants were awarded to Russian participants by the Higher School of Economics and 14 European-based students received travel support from the European Science Foundation (ESF) through the ELIAS network.

The main RuSSIR program was compiled based on peer-review of 15 submitted course proposals; five of them were selected for presentation. Additionally, there were five invited courses on the main topic of RuSSIR 2015, i.e., social network analysis and graph mining. Overall, the school program consisted of two plenary courses and eight regular courses run in two parallel tracks:

- Data Science for Massive (Dynamic) Networks, Panos M. Pardalos (University of Florida, USA)
- Community Detection in Networks, Santo Fortunato (Aalto University, Finland)
- Text Quantification, Fabrizio Sebastiani (Qatar Computing Research Institute, Qatar)

4 http://www.esf.org/.
5 http://www.elias-network.eu/.
Leveraging Knowledge Graphs for Web Search, Gianluca Demartini (University of Sheffield, UK)

Online/Offline Evaluation of Search Engines, Evangelos Kanoulas (University of Amsterdam, The Netherlands)

Models of Random Graphs and Their Applications to the Web-graph Analysis, Andrey Raigorodsky (Moscow Institute of Physics and Technology, Moscow State University, and Yandex, Russia)

Visual Object Recognition and Localization, Ivan Laptev (Inria Paris-Rocquencourt, France)

Contextual Search and Exploration, Charles L.A. Clarke (University of Waterloo, Canada), Jaap Kamps (University of Amsterdam, The Netherlands), Julia Kiseleva (Eindhoven University of Technology, The Netherlands)

Big Data-Driven Logistics, Athanasios Migdalas (Luleå University of Technology, Sweden)

Big Data Analytics with R, Athanasia Karakitsiou (Luleå University of Technology, Sweden)

Sponsoring organizations made three scientific presentations in addition to the main school program. Eugene Kharitonov from Yandex presented a novel methodology that allows less exhaustive online experimentation for search engines; Vladimir Gulin from Mail.ru focused on user behavior analysis; Dmitry Bugaychenko from Ok.ru discussed the connection between the size of data and its usefulness.

For the ninth time the RuSSIR Young Scientist Conference was organized within the school program. The conference facilitated a scientific dialog between young researchers from different areas such as mathematics, computer science, and linguistics as well as social and media sciences. The conference ran over two consecutive evenings and consisted of two parts: oral presentations and poster sessions. There were two types of submissions: full papers that underwent a thorough reviewing process and short poster notes. Out of 17 submitted full papers, six were accepted for oral presentation at the conference and are published in the current volume. During the poster sessions all participants had an opportunity to discuss and exchange their research results and ideas. As in the previous years, the Young Scientist Conference was one of the main highlights of the school.

Charles Clarke, Jaap Kamps, and Julia Kiseleva organized a hackathon as a part of their tutorial. The hackathon was designed in a way similar to the TREC 2015 Contextual Suggestion Track. The participants were asked to recommend to the lecturers a number of places to visit in St. Petersburg, based on the lecturers’ profiles and external sources about the city. The hackathon attracted 30 students who formed ten teams. The winning teams were selected based on the originality, relevance, and efficiency of the proposed solutions:

- MAD IT (Best System Award) – Maria Zagulova, Andrey Poletaev, Dmitry Zhelonkin, Ivan Grechikhin, Tatiana Nikulina

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6 [https://sites.google.com/site/treccontext/](https://sites.google.com/site/treccontext/)
The lecturers visited several of the recommended venues over the weekend and confirmed the high relevance of the suggestions.

RuSSIR 2015 was accompanied by two social events. The welcome party was held on the HSE premises on the first day of the school. It aimed to give participants and lecturers an opportunity to meet each other in an informal environment. Also, during the welcome party the RuSSIR sponsors had a chance to present their companies. A boat trip on the fourth day of the school took the participants along the beautiful Neva river and its numerous branches to show the magnificent view of the imperial St. Petersburg by night.

The volume features two sections: lecture notes ranging from 13 to 51 pages and six selected revised papers from the associated Young Scientist Conference (up to 20 pages each). The previous proceedings are published in the CCIS series as Vol. 505.

The 9th Russian Summer School in Information Retrieval was a successful event: It brought together participants with diverse backgrounds from Russia and abroad and facilitated a cross-disciplinary exchange of experience and ideas. Students had a unique opportunity to learn new material that is not usually present in university curricula and got feedback from peers and lecturers during the poster sessions and informal communications. The event contributed to supporting a lively information retrieval community in Russia and establishing ties with international colleagues. The organizers received very positive feedback from attendees on all aspects of the school.

We would like to thank all the local Organizing Committee members (especially, Daria Yudenkova) for their commitment, which made the school possible, all the Program Committee members for their time and efforts ensuring a high level of quality for the RuSSIR 2015 program, and, in particular, all the lecturers and students who came to St. Petersburg and made the school such a success. We also would like to thank the student volunteers who contributed to the school organization on-site. Our special gratitude goes to Maxim Gubin, who was responsible for legal and financial matters.

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7 http://dx.doi.org/10.1007/978-3-319-25485-2.
9 http://go.mail.ru/.
10 http://www.elias-network.eu/.
11 http://google.com/.
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