

# KDD 2017 Chairs' Welcome Message

It is our great pleasure to welcome you to the 2017 ACM Conference on Knowledge Discovery and Data Mining – KDD 2017. We hope that the content and the professional networking opportunities at KDD 2017 will help you to succeed professionally by enabling you to: identify new technology trends; learn from contributed papers, presentations, and posters; discover new tools, processes and practices; identify new job opportunities; and hire new team members.

The terms “Data Science”, “Data Mining” and “Big Data” have, in the last few years, grown out of research labs and gained presence in the media and in everyday conversations. We also hear these terms on social media and from decision makers at various level of governments and corporations. The impact of these technologies is felt in almost every walk of life. Importantly, the current rapid progress in data science is facilitated by the timely sharing of newly discovered and developed representations and algorithms between those working in research and those interested in industrial deployment. It is the hallmark of KDD conferences in the past that they have been the bridge between theory and practise, the great facilitator and catalyst for this exchange. Researchers and practitioners meet in person and interact in a meaningful way over several days. The conference program, with its three parallel tracks - the Research Track, the Applied Data Science Track and the Applied Invited Speakers Track - brings the two groups together. Participants are welcome to freely attend any track, and the events common for all tracks.

The conference this year continues with its tradition of a strong tutorial and workshop program on leading edge issues of data mining during the first two days of the program. The last three days are devoted to contributed technical papers, describing both novel, important research contributions, and deployed, innovative solutions. Three keynote talks, by Cynthia Dwork, Bin Yu, and Renée J. Miller touch on some of the hard, emerging issues before the field of data mining. With a growing industry around AI assistants, our KDD Panel brings together industry experts in this field to spawn discussions and an exchanges of ideas. We have an outstanding lineup of industry speakers sharing their experiences and expertise in deploying industrial data mining solutions. We continue a strong hands-on tutorial program, in which participants will learn how to use practical data science tools. In order to broaden the impact of KDD and to increase the participation of attendees who would greatly benefit from the conference but would have otherwise found it financially challenging to attend, we reserved a substantial budget for travel grants. KDD 2017 awarded a record USD 145k for student travel and also set aside USD 25k to enable smaller startups to attend. With the new “Meet the Experts” sessions, KDD 2017 also gives researchers and practitioners a unique opportunity to form professional networks and to share their perspectives with others interested in the various aspects of data science. We hope that the KDD 2017 conference will serve as a meeting ground for researchers, practitioners, funding agencies and investors to help create new algorithms and commercial products.

The table below summarizes numerically different elements of the conference program and provides acceptance rates, whenever applicable.

Venue or Track	Reviewed	Accepted	Acceptance Rate
Research Track Papers	748	64 <sup>*</sup> , 66 <sup>+</sup>	8.6 <sup>*</sup> , 8.8 <sup>+</sup>
Applied Data Science Track Papers	390	36 <sup>*</sup> , 50 <sup>+</sup>	9.2 <sup>*</sup> , 12.8 <sup>+</sup>
Workshops	36	22	61.1
Tutorials	35	22	62.8
Hands-on Tutorials	8	8	NA
Applied Data Science Talks	Invited	11	NA
Regular Keynotes	Invited	3	NA
Panels	Invited	2	NA

Papers: <sup>\*</sup>oral, <sup>+</sup>poster

Putting together KDD 2017 has been a wonderful team effort by the members of the organizing committee. We thank the authors and the speakers for providing the content of the program. We are grateful to the program committee and the senior program committee, who worked very hard in reviewing papers and providing feedback for authors. Finally, we thank the numerous sponsors and ACM SIGKDD for their support in hosting the conference.

We hope that you will find this program interesting and thought-provoking, and that the conference will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world. We also hope that the conference facilities, and the host city of Halifax, Nova Scotia, Canada, will provide a friendly environment and many opportunities for such fruitful discussions and exchanges.

**Stan Matwin** (*General Chair*)

**Shipeng Yu** (*General Chair*)

**Faisal Farooq** (*Associate General Chair*)

*KDD'17 Chairs*