A Message from the KDD 2019 General Chairs

Our society as we know it, is going through a fundamental digital transformation. Fueling this transformation is the insights we gain from data in service of one and in service of all. We are holding the future in our hands and therefore share both the excitement and the responsibility of making our innovations useful and trustworthy for each other. Over the last quarter of a century, now in the twenty fifth year since its inception, our community has met each year at the annual conference on Knowledge Discovery and Data Mining – KDD. From humble beginnings of a symposium in 1994, we have become a major movement for innovation in every field where computing plays a role today. Thousands of practical applications fueled by peer-reviewed research that is presented at KDD inform and touch the lives of millions of global citizens. It is time to pause, reflect and celebrate the movement that has grown from a few dozen researchers to a community of tens of thousands of industry and academic participants. It is with this spirit of reflection and celebration that we welcome you to join us at the frontiers of innovation and human spirit in the city of Anchorage, Alaska for KDD 2019.

With such great success comes greater responsibility to ensure we focus on making the world safer, better and more just. Data Mining as a term has largely morphed into data science, and is often used interchangeably with machine learning. The considerations for designing algorithms that learn from larger and more diverse datasets are very different than designing algorithms for small datasets that were a norm just a few decades ago. The importance of end-to-end solutions and role that data science tools play in enabling them is well recognized. While it is obvious to many of us that specific algorithms are but tools, we must resist the temptation to hype them as generalizable intelligence. There is a need for careful debate around making results of the algorithms fair and transparent. We thus need to discuss the impacts of our work in light of its ethics, fairness, and explainability of our tools. The agenda of the conference is thus two fold; focusing on first the richness of algorithmic improvements and second, the impact of the field across our environment, our health, our social interactions and our desire for automation of every day processes from farming to driving to marketing and even as fundamental a task as speaking and listening.

This twenty-fifth meeting of KDD has many firsts; a record number of submissions (400+ more than the prior record), a double blind review process for research track, increased focus on diversity and inclusion through the organization and programmatic elements, a record number of workshops in the program to enable small group interactions, the addition of Earth Day as a special theme day focusing on environment and climate change, a comprehensive offering of hands-on tutorials from most major machine learning tool vendors, evolving the KDD Cup into a multi-theme contest with significant prize money, and ensuring that we can provide childcare for participants, to name a few.

The first two days of the conference include tutorials by experts in their field and workshops and theme days, followed by three rigorous yet enjoyable days of research papers, applied data science papers and over 20 applied invited speakers sharing views from the trenches of industrial applications. We have also added a keynote plenary panel where the community can come and discuss the why, where and how of democratizing data science and its societal implications. To ensure that the conversation continues long into the night, this panel is followed by the KDD 25th Anniversary Celebration. There are two evening receptions with poster sessions as well to allow attendees to network with each other and discuss technical details of papers in small group settings. All this is made possible with the generous support of our sponsors who have, to date, pledged over USD 1M in sponsorships! We thank them.

KDD is completely volunteer run and managed. Behind the scenes, ensuring this success is a team of committed organizers who share the passion for data science and tirelessly give back to make the conference a huge success.

With the spirit of the wild that Alaska is known for and is a true inspiration for all researchers, academics, industry practitioners, and entrepreneurs in data science, machine learning and AI, we welcome you to participate and share your learnings at KDD 2019.

Ankur Teredesai & Vipin Kumar