

2nd Special Session on
Intelligent Data Mining

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2016 IEEE International Conference on Big Data
(IEEE BigData 2016)

<http://cci.drexel.edu/bigdata/bigdata2016/>

Dec 5-8, 2016, Washington D.C., USA

Recent developments in processing, storing, and sharing huge amount of data become problem due to the lack of new approaches, techniques, methods, algorithms and technologies. Researchers try to find proper solutions based on their experiences and make contributions to current data mining and classification knowledge. This approach actually causes new set of problems due to the missing theoretical notions, lack of necessary disciplines and insufficient awareness on data security, information retrieval, social networking within behavioral and social and ethical issues. This special session seeks solutions on interdisciplinary gaps between data and intelligent approaches.

The AI & ML fields are interdisciplinary, including computer science, mathematics, psychology, linguistics, philosophy and neuroscience. There is no software or hardware available to solve problems like human's do. Researchers only make assumptions to replicate biological architectures. So, the brain is capable of change and recognizes experiences. Every day, there are more than 7 billion people works for processing limitless number of data like a single computer through sophisticated cloud networks. Each brain has own big data warehouse and biological CPU.

Nowadays, researchers use interdisciplinary way to understand knowledge among all types of resource including data, document, tool, device, experience, process and people. This approach may help to understand biological evolution to propose robust and powerful approaches between human nature and big data processing.

Intelligent Data Mining term is not only related to Computer Science. This special session opens to every researcher as well as industrial partners to make contribution.

The aims of this Special Session on Intelligent Data Mining are to:

- Bring researchers and experts together to discuss and share their experiences
- Share the current and new research topics and ideas,
- Improve and enhance personal, enterprise, national and international awareness,
- Provide a platform to present and discuss recent advancements,
- Increase international collaborations among university–industry–institutions,

in the fields of theory and applications of data mining, artificial intelligence, computer science, mathematics, psychology, linguistics, philosophy, neuroscience and other disciplines to discuss better understanding of big data and intelligence.

The papers submitted to this special session might be in a large range of topics that include theory, application and implementation of artificial intelligence, machine learning and data mining including the topics given below,

Use of **Artificial Intelligence** | **Machine Learning** in **Big Data** as

- Data Mining, Data Science and Big Data,
- Data Warehouse, Clustering, Visualization
- Security, Privacy,
- Big DaaS
- Scalable Computing, Cloud Computing,
- Knowledge Discovery, Integration, Transformation
- Information Retrieval,
- Data Classification, Regression, Cleaning,
- Smart Cities & Energy
- Social Media, Social Networking, Social Data,
- Semantics,
- IoT
- Multimedia
- Mobile Computing
- Sensors, Networks, Devices
- Mathematics,
- Psychology,
- Linguistics,
- Philosophy,
- Neuroscience,
- Biometric,
- Sustainability
- Human Biology,
- Bioinformatics,
- Cognitive Science,
- Surveillance,
- Business Intelligence,
- Recent Theory, Trends, Technologies and Applications,
- Future Directions and Challenges in Intelligent Data Mining ,
- Industrial Challenges in Intelligent Data Mining ,
- Demo Applications,

Papers should be submitted for this special session by **Sept 23, 2016**, at the conference **special session submission** system (<http://cci.drexel.edu/bigdata/bigdata2016/>). Papers should be submitted as a pdf in 2-column IEEE format. Detailed instructions for the authors can be found at the conference website. Accepted papers will be published in the conference proceedings. All accepted papers must be presented by one of the author/s in the conference to include the article in the proceedings.

If you have any question about this special session, please do not hesitate to direct your question to the special session organizer Dr. Uraz Yavanoglu (urazyavanoglu@gmail.com, uraz.yavanoglu@asu.edu)

Special Session Organizer:

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The important dates for this special session are:

Full Paper Submission Deadline :	Sept 23, 2016 11:59pm PST
Notification of Acceptance :	Oct 24, 2016
Camera-ready papers & Pre-registration :	Nov 5, 2016, 11:59pm PST
Conference Dates :	Dec 5-8, 2016