

This summer program will be jointly instructed by Professors Yi Shang and Dong Xu of the MU Electrical Engineering and Computer Science Department, with the support of a group of outstanding graduate teaching assistants.



Dr. Shang is a Professor and Director of Graduate Studies in the EECS Department. He has published more than 190 refereed papers in international journals and conferences in the fields of artificial intelligence, mobile and distributed computing, bioinformatics, and wireless sensor networks, and holds 6 U.S. patents. He has worked as a researcher at the University of Illinois at Urbana-Champaign and the renowned Xerox Palo Alto Research Center (PARC), Palo Alto, CA. He has received research funding from sources, including National Science Foundation, National Institutes of Health, U.S. Army, DARPA, Microsoft, and Raytheon. Dr. Shang received his BS degree from the University of Science and Technology of China, MS from Chinese Academy of Sciences, and PhD from University of Illinois at Urbana-Champaign in 1997. He is a lifetime member of ACM and senior member of IEEE.



Dong Xu is a Shumaker Endowed Professor of the EECS Department, Director of Information Technology Program, with appointments in the Christopher S. Bond Life Sciences Center and the Informatics Institute at the University of Missouri-Columbia. He obtained his PhD from the University of Illinois, Urbana-Champaign in 1995 and did two years of postdoctoral work at the US National Cancer Institute. He was a Staff Scientist at Oak Ridge National Laboratory until 2003 before joining the University of Missouri, where he served as Department Chair of Computer Science during 2007-2016. His research is in computational biology and bioinformatics, especially machine-learning applications in bioinformatics. He has published about 300 papers. He was elected to the rank of American Association for the Advancement of Science (AAAS) Fellow in 2015.



**College of
Engineering**

Department of Electrical
Engineering & Computer Science

**Big Data Analytics
Summer Program 2019**

**Session 1: July 7 – July 28, 2019
Session 2: July 14 – Aug. 4, 2019**

Please visit the following website to register prior to April 15, 2019:

<https://engineering.missouri.edu/summer-experience/>.



- **Big Data is transforming science, engineering, medicine, healthcare, finance, business, and ultimately society itself.**
- **Big Data analytics represents a new era of computing, where data in any format may be processed and exploited to extract insights for industries and organizations to make informed decisions, whether that data is in-place or at-rest, in large volume, structured or unstructured.**
- **This program will introduce key Big Data processing and analytics technologies, teach practical skills and practices, and offer hand-on experiences using Amazon Web services and other open-source software and resources to bridge the gap between classroom learning and the real world.**
- **This program will include various enrichment and social activities, such as a visit to a local IBM branch, seminars by guest speakers, and trips to nearby attractions. *A certificate is issued upon completion of the program.***

This program is open to undergraduate students, graduate students, and professionals. Basic knowledge of college-level mathematics and/or statistics is required.

Group Discount

For a group of 5 or more students from the same school, the cost is reduced to \$3,800 per person.

Topics include:

- Introduction to Big Data and Data Science.
- Introduction to Big Data technologies, including Hadoop, MapReduce, and Apache Spark.
- Data mining with Spark MLlib and RapidMiner.
- General data analysis, recommender systems, clustering and summarization, predictive analytics.
- Introduction to deep learning fundamentals and applications.

CONTACT

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The website for this program can be found at:

<https://engineering.missouri.edu/summer-experience/>.

PROGRAM COSTS:

OPTION 1:

(This option includes the cost of the program/lab fees, administrative fees, housing in a campus residential hall, meals, transportation to/from Columbia airport, local trips, and social activities.)

= \$3,950 per student

OPTION 2:

(This option includes the cost of the program/lab fees, administrative fees, local trips, and social activities. For this option, the student would be responsible for their own transportation, housing, and meals.)

= \$1,900 per student

**Please note that neither of these options includes the cost of airfare.