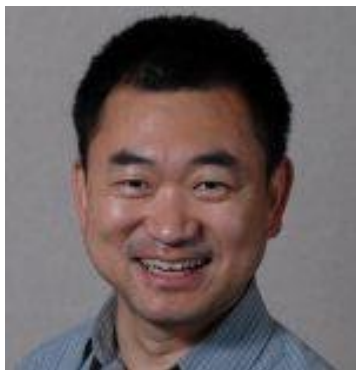


This summer program will be jointly instructed by Professors Yi Shang and Dong Xu of the MU Electrical Engineering and Computer Science (EECS) Department, with the support of a group of outstanding graduate teaching assistants.



Dr. Shang is a Professor, Robert H. Buescher Faculty Fellow, and Director of Graduate Studies in the EECS Department. He has published more than 200 papers in international journals and conferences in the fields of artificial intelligence, machine learning, mobile and distributed computing, bioinformatics, and holds 6 U.S. patents. He has worked as a senior researcher at the renowned Xerox Palo Alto Research Center (PARC), Palo Alto, CA. He has received research funding from many sources, including National Science Foundation, National Institutes of Health, U.S. Army, DARPA, Microsoft, Raytheon, Missouri Department of Conservation, etc. 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 Curators' Distinguished Professor in the Department of Electrical Engineering and Computer Science, with appointments in the Christopher S. Bond Life Sciences Center and the Informatics Institute at the University of Missouri-Columbia. He obtained his Ph.D. 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. He has published more than 400 papers with more than 21,000 citations and an H-index of 74 according to Google Scholar. He was elected to the rank of American Association for the Advancement of Science (AAAS) Fellow in 2015 and American Institute for Medical and Biological Engineering (AIMBE) Fellow in 2020.



**College of  
Engineering**

Department of Electrical  
Engineering & Computer Science

**Big Data Analytics & AI  
Summer Program 2023**

**Session 1: July 2 – July 22, 2023**

**Session 2: July 9 – July 29, 2023**

Registration deadline: June 1, 2023

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



- Big Data & AI are transforming science, engineering, medicine, healthcare, finance, business, and societies.
- Big Data analytics & AI represent 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 Big Data analytics and AI technologies, teach practical skills and practices, and offer hands-on experiences using cloud services and 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 \$4,200 per person.

#### **Topics include:**

- Introduction to fundamentals of Big Data, Data Science, and Cloud Computing.
- Introduction to Big Data technologies, including Hadoop, Apache Spark, and RapidMiner.
- Data mining and machine learning with Spark MLlib and RapidMiner.
- Deep learning basics and applications with TensorFlow and PyTorch.
- General data analysis, recommender systems, and predictive analytics.

#### **CONTACT**

Yi Shang, Professor and Director of Graduate Studies

[Department of Electrical Engineering and Computer Science](#)

201 Naka Hall, University of Missouri, Columbia, MO 65201

Phone (573) 884-7794; Fax (573) 882-8318; shangy@missouri.edu

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.)*

**= \$4,500 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.)*

**= \$2,400 per student**

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