

# Emerging Data Science Methods for Complex Biomedical and Cyber Data

## Third Workshop Program

**DAY ONE: THURSDAY, MARCH 16, 2023**

### REGISTRATION AND REFRESHMENTS

8:00 am - 8:45 am GCC Lobby

### SESSION 1

*Chair: Jie Chen, PhD*

8:45 am - 9:15 am Opening Remarks:  
Neil MacKinnon, PhD, Provost & Executive VP, AU  
Mark Hamrick, PhD, Senior Associate Dean for Research, Medical  
College of Georgia, AU

9:15 am - 10:05 am **Privacy: Challenges and Road Ahead**  
*James Joshi, PhD, National Science Foundation (SaTC) and University  
of Pittsburgh, Pittsburgh, PA*

10:05 am - 10:15 am Q & A

10:15 am - 10:30 am Coffee Break GCC Lobby

### SESSION 2

*Chair: Ahmed Aleroud, PhD*

10:30 am - 11:20 am **Securing Big Data in the Age of Artificial Intelligence**  
*Murat Kantarcioglu, PhD, University of Texas at Dallas, Dallas, TX*

11:20 am - 11:30 am Q & A

11:30 am - 12:20 pm **New Methods for Robust Time-Series Mining**  
*Aditya Prakash, PhD, Georgia Institute of Technology, Atlanta, GA*

12:20 pm - 12:30 pm Q & A

**POSTER SESSION (AND LUNCH)** *CHAIRS: AHMED ALEROUD, PHD & SANTU GHOSH, PHD*

12:30 pm - 2:10 pm GCC Lobby

### SESSION 3

*Chair: Hongyan Xu, PhD*

2:10 pm - 3:00 pm **Learning from Data in Single-Cell Transcriptomics**  
*Sandrine Dudoit, PhD, University of California, Berkeley, CA*

3:00 pm - 3:10 pm Q & A

3:10 pm - 4:00 pm **Ensemble Methods for Testing a Global Null with Applications to Whole Genome Sequencing Studies**

*Xihong Lin, PhD, Harvard University, Boston, MA*

4:00 pm - 4:10 pm Q & A

4:10 pm - 4:30 pm Coffee Break GCC Lobby

**INTEGRATED PANEL DISCUSSION I** INTRODUCTION OF THE PANEL LEAER: STEVEN WELDON, MS

4:30 pm - 5:15 pm Panel Discussion

Leader: *Doug Miller, MD, Augusta University, Augusta, GA*

**SOCIAL HOUR & BANQUET**

The Pinnacle Club  
699 Broad Street, 17th Floor

6:00 pm - 6:45 pm Social Hour (Cash bars for drinks)

6:45 pm - 8:45 pm Banquet

Remarks:

*Alex Schwarzmann, PhD, Dean, School of Computer and Cyber Sciences, AU*

***DAY TWO: FRIDAY, MARCH 17, 2023***

**REGISTRATION AND REFRESHMENTS**

8:00 am – 8:30 am GCC Lobby

**SESSION 4**

*Chair: Jie Chen, PhD*

8:30 am - 9:20 am **Applications of Machine Learning to Privacy and Security**

*Gagan Agrawal, PhD, Augusta University, Augusta, GA*

9:20 am - 9:30 am Q & A

9:30 am - 10:20 am **Privacy, Data Privacy, and Differential Privacy**

*Xiao-Li Meng, PhD, Harvard University, Cambridge, MA*

10:20 am - 10:30 am Q & A

10:30 am - 10:45 am Coffee Break GCC Lobby

**FIVE-MINUTE PRESENTATIONS** Chair: Steven Weldon, MS

10:45 am - 11:45 am Presentation schedule (details will be onsite)

**LUNCH**

11:45 am – 12:30 pm GCC Lobby

**SESSION 5** Chair: Santu Ghosh, PhD

12:30 pm - 1:20 pm **Modeling complex data using Bayesian Local Models**  
Bani Mallick, PhD, Texas A&M University, College Station, TX

1:20 pm - 1:30 pm Q & A

1:30 pm - 2:20 pm **Bayesian Multiset Canonical Correlation Analysis through Latent Factors**  
Elizabeth Slate, PhD, Florida State University, Tallahassee, FL

2:20 pm - 2:30 pm Q & A

2:30 pm - 2:45 pm Coffee Break GCC Lobby

**INTEGRATED PANEL DISCUSSION II** INTRODUCTION OF THE PANEL LEADER: HONGYAN XU, PHD

2:45 pm - 3:30 pm Panel Discussion  
Leader: Jennifer Priestley, PhD, Professor Emerita of Statistics and Data Science, Kennesaw State University & Chief Data Officer, Flock Specialty Finance

**AWARDS AND CLOSING REMARKS**

3:30 pm – 3:45 pm Poster/Five-Minute Presentation Awards  
Workshop Organizing Committee

3:45 pm – 4:00 pm Closing Remarks  
Workshop Organizing Committee