siam 2025

International Conference on Data Mining

May 1–3, 2025 • The Westin Alexandria Old Town Hotel | Alexandria, Virginia, U.S.

Online Program and Mobile App

Attendees are encouraged to view the Online Program Schedule:

https://www.siam.org/conferences-events/siam-conferences/sdm25/program/program-abstracts/

The Mobile App and Online Program Schedule contain the most up-to-date information.
A searchable abstract document is also posted.

SIAM Events Mobile App

www.tripbuildermedia.com/apps/siam

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| **Wednesday, April 30** | **Thursday, May 1** | **Friday, May 2** |

Workshops follow their own posted schedule. BOTH workshop and tutorial participants are strongly encouraged to consult the workshop and tutorial websites for session details.

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4:00 p.m. – 6:00 p.m.
Registration
Hopkins Foyer

Thursday, May 1

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7:00 a.m. – 4:30 p.m.
Registration
Hopkins Foyer

....
7:30 a.m. – 8:00 a.m.
Continental Breakfast
Edison Pre Function

....
8:00 a.m. – 8:20 a.m.
Welcome Remarks & Best Paper Award Announcement
Edison D

....
8:20 a.m. – 9:30 a.m.
IP1 Title TBD
Michael Lederman Littman, National Science Foundation, U.S.
Edison D

....
9:30 a.m. – 10:00 a.m.
Coffee Break
Edison Pre Function

....
10:00 a.m. – 12:00 p.m.
Concurrent Sessions
MT1 Sharing is Caring: A Practical Guide to Fair(er) Release of Open Scientific Data
Edison A
CP1 Embeddings and Features
Edison D
CP2 Anomaly Detection
Edison B
CP3 Learning Under Uncertainty
Wright

....
10:00 a.m. – 3:30 p.m.
Concurrent Sessions
WS1 AI for Time Series Analysis: Theory, Algorithms, and Applications
Bell
WS2 The Second Workshop on Metacognitive Prediction of AI Behavior
Edison C

....
12:00 p.m. – 1:30 p.m.
Lunch Break

1:30 p.m. – 3:30 p.m.
Concurrent Sessions
MT2 Supervised Algorithmic Fairness in Distribution Shifts
Wright
MT3 Integrating Textual and Graph Data: Advancing Knowledge Discovery with Semantic and Structural Insights
Edison A
CP4 Graph Models and Algorithms
Edison D
CP5 Recommender Systems
Edison B

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3:30 p.m. – 4:00 p.m.
Coffee Break
Edison Pre Function

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4:00 p.m. – 5:00 p.m.
PD AI for Science
Edison D

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5:00 p.m. – 6:00 p.m.
Dinner Break

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6:00 p.m. – 7:00 p.m.
Welcome Reception and Poster Session I (CP1-CP12)
Edison EFG

Friday, May 2

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7:30 a.m. – 4:30 p.m.
Registration
Hopkins Foyer

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7:30 a.m. – 8:00 a.m.
Continental Breakfast
Edison Pre Function

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8:00 a.m. – 8:20 a.m.
Remarks & IBM Award
Edison D

....
8:20 a.m. – 9:30 a.m.
IP2 Thinking Outside the Ballot Box
Ariel Procaccia, Harvard University, U.S.
Edison D

....
9:30 a.m. – 10:00 a.m.
Coffee Break
Edison Pre Function

10:00 a.m. – 12:00 p.m.
Concurrent Sessions
MT4 Federated Graph Learning: Recent Advances and Future Directions
Edison A
MT5 Causal Discovery in a non-Ideal World
Edison C
CP6 Clustering
Edison D
CP7 Applications
Edison B
CP8 Blue Sky 1: Advancing AI and Machine Learning
Wright

....
10:00 a.m. – 3:30 p.m.
WS3 3rd Data Science for Smart Manufacturing and Healthcare Workshop
Bell

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12:00 p.m. – 1:30 p.m.
Lunch Break

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1:30 p.m. – 2:45 p.m.
IP3 Title TBD
Bryan Perozzi, Stony Brook University, U.S.
Edison D

....
2:45 p.m. – 3:15 p.m.
Coffee Break
Edison Pre Function

....
3:15 p.m. – 5:15 p.m.
Concurrent Sessions
MT6 Systems for Scalable Graph Analytics and Machine Learning: Trends and Methods
Edison A
MT7 Symbolic Regression: Towards Interpretability and Automated Scientific Discovery
Edison C
CP9 Learning on Graphs
Edison D
CP10 Large Language Models
Edison B
CP11 Blue Sky 2: AI for Scientific and Societal Impact
Wright

....
5:15 p.m. – 6:00 p.m.
Early Career Event
Edison D

....
6:00 p.m. – 8:00 p.m.
Poster Session II
(CP13-20 & Doctoral Forum)
Edison EFG

Saturday, May 3

7:30 a.m. – 3:00 p.m.
Registration
Hopkins Foyer

7:30 a.m. – 8:00 a.m.
Continental Breakfast
Edison Pre Function

8:00 a.m. – 10:00 a.m.
Concurrent Sessions
MT8 Empowering Retrieval-augmented Generation with Graph-structured Knowledge
Edison A
MT9 Exploitation and Mitigation: Understanding Large-Scale Machine Learning Robustness under Paradigm Shift
Edison C
CP12 Machine Learning for Healthcare
Edison D
CP13 Data Intergration and Fusion
Edison B
CP14 Time-Series Analysis and Forcasting
Wright

8:00 a.m. – 3:30 p.m.
WS4 The 2nd Workshop on Advances in Robust and Reliable Machine Learning (ARRML'25)
Bell

10:00 a.m. – 10:30 a.m.
Coffee Break
Edison Pre Function

10:30 a.m. – 10:45 a.m.
Closing Remarks & Doctoral Forum Best Poster Award
Edison D

10:45 a.m. – 12:00 p.m.
IP4 Title TBD
Johan Ugander, Stanford University, U.S.
Edison D

12:00 p.m. – 1:30 p.m.
Lunch Break

1:30 p.m. – 3:30 p.m.
Concurrent Sessions
MT10 Mining Temporal Graphs: Algorithms and Applications
Edison A
MT11 Unifying Spectral and Spatial Graph Neural Networks
Edison C
CP15 Graph Neural Networks
Edison D
CP16 Learning and Optimization
Edison B

Abbreviation Key
CP = Contributed Presentation Session
IP = Invited Plenary Speaker
MS = Minisymposium
MT = Tutorial
PD = Panel Discussion
PP = Poster Session

G

A

EDISON BALLROOM

F

D

B

E

C

HOPKINS BOARDROOM
PRIVATE FOYER

ELEVATOR
LOBBY

EXIT

PREFUNCTION

EXIT

WRIGHT   BANNEKER   WHITNEY   CARVER   BELL   CURIE

HOPKINS
BOARDROOM