# IEEE BigData 2024 Program Schedule Washington, DC, USA

#### Conference time zone: US Eastern Standard Time

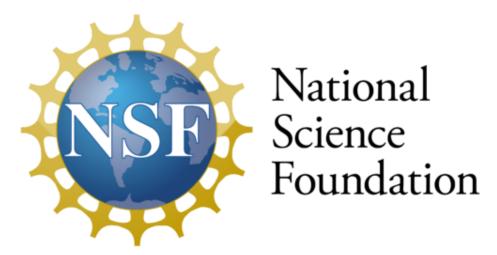
The link to download the BigData 2024 conference proceedings for BigData24 and access the pre recorded videos is:

#### **Meeting Room**

| Floor     | Room            |
|-----------|-----------------|
| Lobby     | CONGRESSIONAL A |
| Lobby     | CONGRESSIONAL B |
| Lobby     | CONGRESSIONAL C |
| Lobby     | CONGRESSIONAL D |
| Lobby     | CONGRESSIONAL E |
| Lobby     | CAPITOL A       |
| Lobby     | CAPITOL B       |
| Ballroom  | BUNKER HILL     |
| Ballroom  | LEXINGTON       |
| Ballroom  | CONCORD         |
| Ballroom  | COLUMBIA A      |
| Ballroom  | COLUMBIA B      |
| Ballroom  | COLUMBIA C      |
| Ballroom  | REGENCY A       |
| Ballroom  | REGENCY B       |
| Ballroom  | REGENCY C       |
| Ballroom  | REGENCY D       |
| 2nd floor | YELLOWSTONE     |
| 2nd floor | EVERGLADES      |
| 2nd floor | GRAND TETON     |
| 2nd floor | BRYCE           |
| 2nd floor | YOSEMITE        |
| 2nd floor | GLACIER         |
| 2nd floor | SEQUOIA         |
| 2nd floor | OLYMPIC         |

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### IEEE Big Data 2024 Program Schedule

## Washington DC, USA December 15 - December 18, 2024

Keynote Lecture: **60 minutes** (50-min talk + 10-min Q/A) Main conf. regular: **25 mins** (20-minute talk + 5-min Q/A) Main conf. short: **15 minutes** (11-min talk + 4-min Q/A)

Registration: Saturday, Dec 14 14:30-18:00 PM

(Location: Regency Foyer)

|             |                   | Day 1: Sunday, December 15, 2024   |                              |
|-------------|-------------------|--|------------------------------|
| Time        | Location          | Workshop, Tutorial, Special Symposium,<br>Special Session  | Chairs                       |
| 7:30-17:00  | Regency Foyer     | Registration   | Kunpeng Liu,<br>Dongjin Song |
| 10:00-10:30 | Columbia Foyer    | Coffee Break   |                              |
| 12:30-14:00 |                   | Lunch (on your own)  |                              |
| 16:00-16:30 | Columbia Foyer    | Coffee Break   |                              |
| 8:30-12:30  | Congressional - A | Workshop #15: The 4th International Workshop on Multi-Modal Medical Data Analysis  Website: <a href="https://mmmda.bupt.cc/">https://mmmda.bupt.cc/</a>  | Bo Zhang                     |
| 14:00-18:00 | Congressional - A | Workshop #48: DCAI: The 3rd International Workshop on Data-Centric AI  Website: https://data-centric-ai-dev.github.io/BigData202  4/ Online meeting link: https://pdx.zoom.us/j/81474244399 Password: 899906 | Yanjie Fu                    |
| 8:30-12:30  | Congressional - B | Workshop #51: Big Data and Artificial Intelligence for Personalized Health Care  Website: https://schoolofcomputing.southalabama.edu/aiphc2024/  | Ryan Benton                  |

| 9:00-17:00  | Congressional - C | Special Session: Machine Learning on Big<br>Data  | Alfredo Cuzzocrea                |
|-------------|-------------------|---|----------------------------------|
| 9:00-17:00  | Congressional - D | Workshop #13: The 7th Workshop on Benchmarking, Performance Tuning and Optimization for Big Data Applications (BPOD)  Website: <a href="https://bdal.umbc.edu/bpod-2024/">https://bdal.umbc.edu/bpod-2024/</a> Online meeting link: <a href="https://teams.microsoft.com/l/meetup-join/19%3ameeting_ODkyNDc5ZGMtYTQzMi00MzVILWI2NDMtoGRjMzdhNGQzYzQ4%40thread.vz/0?context=%7">https://teams.microsoft.com/l/meetup-join/19%3ameeting_ODkyNDc5ZGMtYTQzMi00MzVILWI2NDMtoGRjMzdhNGQzYzQ4%40thread.vz/0?context=%7</a> <a href="https://bw22Tid%22%3a%22e9b87214-8e8f-4ad0-90ec-9d5c56c94931%22%2c%22Oid%22%3a%223a35ef13-34ae-4c1b-ac4d-4ce41aeb4de9%22%7d">https://bw22Tid%22%3a%22e9b87214-8e8f-4ad0-90ec-9d5c56c94931%22%2c%22Oid%22%3a%223a35ef13-34ae-4c1b-ac4d-4ce41aeb4de9%22%7d</a> | Zhiyuan Chen                     |
| 8:30-12:30  | Capitol Room - A  | Workshop #17: The 3rd Workshop on Big Data Analytic in Healthcare  Website: https://onlineacademiccommunity.uvic.ca/healthcare4bigdata4analytic/ Online meeting link: https://univr.zoom.us/i/98825737350 Meeting ID: 988 2573 7350   | Alex Kuo and<br>Matteo Mantovani |
| 14:00-18:00 | Capitol Room - A  | Workshop #20: Next-Generation Big Graph Learning and Analytics (Next-Gen-BiGLA)  Website: https://nextgenbigla.github.io/ Online meeting link: https://teams.microsoft.com/l/meetup-join/19%3ameeting ODczZWZIZWMtMTQ2Ny00YWE3LWFIMGQtZGU4NWY2MDI1ZjQ0%40thread.v2/0?context=%7b%22Tid%22%3a%22ae145aea-cdb2-446a-b05a-7858dde5ddba%22%2c%22Oid%22%3a%22f853400a-0a95-4d4b-94e1-715b6aca8497%22%7d  | Xiaofei Zhang                    |
| 9:00-17:00  | Capitol Room - B  | Workshop #23: The 5th International Workshop on Big Data & Al Tools, Methods, and Use Cases for Innovative Scientific Discovery (BTSD) 2024  Website: https://sites.google.com/view/btsd2024/home?authuser=2  | Sangkeun Lee                     |
| 8:30-12:30  | Concord           | Workshop #36: Second International Workshop for securing IoT systems using BigData Website: <a href="https://matrixcloud.ai/washington/">https://matrixcloud.ai/washington/</a> Online meeting link:  | Cristian Bucur                   |

|             |              | https://us02web.zoom.us/j/81488423480  |  |
|-------------|--------------|--|--|
| 14:00-18:00 | Concord      | Workshop #39: The Seventh Workshop on Big Data for Economic and Business Forecasting  Website: <a href="https://bigdataforecast.casconf.cn/">https://bigdataforecast.casconf.cn/</a> Online meeting link: <a href="https://us05web.zoom.us/j/89222374535?pwd=T7VId0HfnEHPuVTaqDlb0dOb8ebkP5.1">https://us05web.zoom.us/j/89222374535?pwd=T7VId0HfnEHPuVTaqDlb0dOb8ebkP5.1</a>                      | Wei Shang  |
| 9:00-17:00  | Columbia - A | Workshop #7: 2nd Workshop on Al Music<br>Generation with Al Music Competition (AIMG<br>2024)  Website:<br><a href="https://www.intellisky.org/workshops/AIMG2024/workshop_AIMG2024.html">https://www.intellisky.org/workshops/AIMG2024/workshop_AIMG2024.html</a>  | Callie Liao  |
| 9:00-17:00  | Columbia - B | Workshop #38: Workshop on Big Data and Al for Healthcare  Website: https://bigdata-ai-health.github.io/icbd2024/ Online meeting link: https://gvsu-edu.zoom.us/j/3966686420?pwd=WGxpc0N4YWcvOU9aWGxWZGYxbXZUdz09   | Ping Chen  |
| 9:00-17:00  | Columbia - C | Workshop #9: 4th Workshop on Knowledge Graphs and Big Data In conjunction with the IEEE Big Data 2024  Website: <a href="https://cci.drexel.edu/kgbigdata/2024/">https://cci.drexel.edu/kgbigdata/2024/</a> Online meeting link: <a href="https://drexel.zoom.us/j/87596985589?pwd=iJT9YbyD4YE5GarUS8fxFibZT6zir5.1">https://drexel.zoom.us/j/87596985589?pwd=iJT9YbyD4YE5GarUS8fxFibZT6zir5.1</a> | Yuan An  |
| 9:00-17:00  | Regency - B  | High School and Undergrad Symposium  | Xuan Wang & Yanjie<br>Fu                           |
| 9:00-17:00  | Regency - C  | Special Session: Federated Learning on Big<br>Data   | Francesco Piccialli                                |
| 9:00-17:00  | Regency - D  | REU Symposium  | Xuechen Zhang,<br>Xinhui Zhao, and<br>Xiaokun Yang |
| 9:00-17:00  | Yellowstone  | Workshop #2: 7th Annual Workshop on Cyber Threat Intelligence and Hunting (CyberHunt 2024) Website: <a href="https://www.cyberhunt2024.cyberhunt.no/">https://www.cyberhunt2024.cyberhunt.no/</a>  | Vasileios Mavroeidis                               |

| 9:00-17:00 | Everglades  | Workshop #46: 7th Workshop on Big Data for CyberSecurity (BigCyber-2024)  Website: <a href="https://sites.google.com/view/bigcyber/home/">https://sites.google.com/view/bigcyber/home/</a>   | Lavanya Elluri           |
|------------|-------------|--|--------------------------|
| 9:00-17:00 | Grand Teton | Workshop #3: 2nd workshop on Big Data Applications for Fight against Crime and Terrorism (BDA4FCT)  Website: <a href="https://bda4fct.iti.gr/">https://bda4fct.iti.gr/</a> Online meeting link: <a href="https://valabitigr.my.webex.com/valabitigr.my/j.php?">https://valabitigr.my.webex.com/valabitigr.my/j.php?</a> MTID=mf5af7bb13b921510fb76a5be18544e44   | Georgios<br>Stavropoulos |
| 9:00-17:00 | Bryce       | Workshop #5: The 9th International Workshop on Application of Big Data for Computational Social Science (ABCSS2024)  Website: https://css-japan.com/en/abcss2024/  | Isamu Okada              |
| 8:30-12:30 | Yosemite    | Workshop #4: 8th International Workshop on Applications of Big Data Methods and Technology in the Transport Industry  Website: <a href="https://bigdataintransport.com/">https://bigdataintransport.com/</a> Online meeting link: <a 88168832591?pwd="https://u-tokyo-ac-jp.zoom.us/j/88168832591?pwd&lt;/td&gt;&lt;td&gt;John Easton&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;14:00-18:00&lt;/td&gt;&lt;td&gt;Yosemite&lt;/td&gt;&lt;td&gt;Workshop #47: 9th Workshop on Advances in High Dimensional (AdHD) Big Data  Website: &lt;a href=" home"="" href="https://u-tokyo-ac-jp.zoom.us/j/88168832591?pwd=" https:="" ieeeadhd2024="" j="" sites.google.com="" u-tokyo-ac-jp.zoom.us="" view="">https://sites.google.com/view/ieeeadhd2024/home</a> | Aristidis Vrahatis       |
| 9:00-17:00 | Sequoia     | Special Session: Intelligent Data Mining   | Uraz Yavanoglu           |

|             |                                 | Day 2: Monday, December 16, 2024   |                              |
|-------------|---------------------------------|--|------------------------------|
| 8:00-17:00  |                                 | Registration   |                              |
| 8:00-8:30   |                                 | Poster Setup   |                              |
| 8:20-9:00   |                                 | Opening Ceremony Conference Chairs: Chang-Tien Lu (Virginia Fusheng Wang (Stony Brook U.) PC Chairs: Wei Ding (U. of Massachusetts, E Liping Di (George Mason U.) Ricardo Baeza-Yates (Northeastern U. Chairs: Kesheng Wu, (Lawrence Berkeley Na Raghu Nambiar (AMD) Luke Jun Huan (Amazon) teering Committee Chair: Xiaohua (Tony) Hu (I Location: Regency Ballroom | Boston)<br>)<br>ational Lab) |
| 9:00-10:00  |                                 | Keynote Speech I  Dr. Haixun Wang, Instacart, USA  Generative Information Retrieval and E-cor  Location: Regency Ballroom  | nmerce                       |
| 10:00-10:30 | Columbia Foyer                  | Coffee Break   |                              |
| 10:00-10:30 | Regency Foyer<br>Columbia Foyer | Poster Display<br>(Session Chairs:Kaiqun Fu, Y   | ⁄ufei Tang)                  |
| Time        | Location                        | Session/Workshop   | Session Chair                |
| 10:30-12:30 | Capitol A                       | D1S1: Foundation Models for Big Data   | Dongjin Song                 |
| 10:30-12:30 | Capitol B                       | D1S2: Big Data Learning and Analytics I  | Shuhan Yuan                  |
| 10:30-12:30 | Columbia A                      | D1S3: Big Data Infrastructure I  | Arya Jadhav                  |
| 10:30-12:30 | Columbia C                      | D1S4: Big Data Science and Foundations I   | Xuan Wang                    |
| 10:30-12:30 | Congressional A                 | D1S5: Big Data Management I  | Fang Jin                     |
| 10:30-12:30 | Congressional B                 | D1S6: Big Data Search and Mining I   | Yanjie Fu                    |
| 10:30-11:30 | Columbia B                      | North American Student Challenge<br>Competition  |                              |
| 9:00-17:00  | Congressional D                 | Workshop #42: From Theory to Practice: Workshop on Large Language and Foundation Models Website:   | Tania Cerquitelli            |

|             |                 | https://sites.google.com/view/wllfm24   |  |
|-------------|-----------------|---|--|
| 10:30-12:30 | Yellowstone     | Challenge Cup: Predicting Chess Puzzle Difficulty   | Dominik Ślęzak                                     |
| 14:00-18:00 | Everglades      | Workshop #34: The 8th Annual Workshop on Applications of Artificial Intelligence in the Legal Industry  Website: The 8th Annual Workshop on                 | Han Qin  |
|             |                 | Applications of Artificial Intelligence in the Legal Industry - Ankura.com  |  |
| 8:30-12:30  | Yosemite        | Workshop #8: 4th IEEE Big Data Workshop on Multimodal AI (MMAI 2024)  | Lindi Liao   |
|             |                 | Website: https://www.comstar-tech.org/workshops/20 24/workshop 2024 MMAI.html   |  |
| 14:00-18:00 | Grand Teton     | Workshop #6: 10th Workshop on Methods to Improve Big Data Science Projects (MIDP-2024)  | Jeffrey Saltz                                      |
|             |                 | Website: <a href="http://www.midp-info.org/2024-workshop.ht">http://www.midp-info.org/2024-workshop.ht</a> <a href="mailto:ml">ml</a>                       |  |
| 8:30-12:30  | Bryce           | Joint Session Workshop #14: 2nd WS on Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment | Teruaki Hayashi<br>Naoki Watanabe<br>Hiroki Sakaji |
|             |                 | Special Session: Understanding New<br>Markets by Data Science, Social Science,<br>and Economics   |  |
|             |                 | Website: http://labs.kbs.keio.ac.jp/naoki50lab/WS_IE EE_BigData2024.pdf   |  |
| 10:30-12:30 | Concord         | I&G-1: Generative AI  | Kesheng Wu   |
| 10:30-12:30 | Glacier         | Special Session: Federated Learning on Big<br>Data  | Francesco Piccialli                                |
| 10:30-12:30 | Congressional C | Special Session: Machine Learning on Big<br>Data  | Alfredo Cuzzocrea                                  |
| 10:30-12:30 | Sequoia         | Special session: Privacy and Security of Big  | Alfredo Cuzzocrea                                  |

|             |                                 | Data   |  |
|-------------|---------------------------------|--|--|
| 12:30-14:00 |                                 | Lunch  |  |
| 14:30-16:00 | Regency<br>Ballroom             | Panel: Big Data and AI: How they benefit each other  | Bhavani Thuraisingham                              |
| 14:00-16:00 | Capitol A                       | D1S7:Data Ecosystem  | Li Zhang   |
| 14:00-16:00 | Capitol B                       | D1S8: Big Data Learning and Analytics II   | Yiqun Xie  |
| 14:00-16:00 | Columbia A                      | D1S9: Big Data Learning and Analytics III  | Yifeng Gao   |
| 14:00-16:00 | Columbia B                      | D1S10: Deep Learning I   | Dongjin Song                                       |
| 14:00-16:00 | Congressional A                 | D1S11: Machine Learning Algorithms I   | Feng Chen  |
| 14:00-16:00 | Congressional B                 | D1S12: Deep Learning II  | Chen Zhao  |
| 14:00-16:00 | Concord                         | I&G-2: Big data Infra & Multi-modality   | Kesheng Wu   |
| 14:00-16:00 | Columbia C                      | I&G-3: Modeling  | Kesheng Wu   |
| 14:00-16:00 | Bryce                           | Joint Session Workshop #14: 2nd WS on Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment  Special Session: Understanding New Markets by Data Science, Social Science, and Economics  Website: <a href="http://labs.kbs.keio.ac.jp/naoki50lab/WS_IEEEBigData2024.pdf">http://labs.kbs.keio.ac.jp/naoki50lab/WS_IEEEBigData2024.pdf</a> | Teruaki Hayashi<br>Naoki Watanabe<br>Hiroki Sakaji |
| 14:00-16:00 | Glacier                         | Special Session: Federated Learning on Big<br>Data   | Francesco Piccialli                                |
| 14:00-16:00 | Congressional C                 | Special Session: Machine Learning on Big<br>Data   | Alfredo Cuzzocrea                                  |
| 14:00-16:00 | Sequoia                         | Special session: Privacy and Security of Big<br>Data   | Alfredo Cuzzocrea                                  |
| 16:00-16:30 | Columbia Foyer                  | Coffee Break   |  |
| 16:00-16:30 | Regency Foyer<br>Columbia Foyer | Poster Display<br>(Session Chairs: Kaiqun Fu, Y  | ⁄ufei Tang)  |

| 16:30-18:00 | Capitol A       | D1S13: Big Data Applications I   | Kaiqun Fu  |
|-------------|-----------------|--|--|
| 16:30-18:00 | Capitol B       | D1S14: Big Data Applications II  | Xuan Wang  |
| 16:30-18:00 | Columbia B      | D1S15: Big Data Analytics I  | Yong Zhuang  |
| 16:30-18:00 | Congressional A | D1S16: Big Data Analytics II   | Md Faisal Kabir                                    |
| 16:30-18:00 | Congressional B | D1S17: Big Data Analytics III  | Yiqun Xie  |
| 16:30-18:00 | Bryce           | Joint Session Workshop #14: 2nd WS on Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment  Special Session: Understanding New Markets by Data Science, Social Science, and Economics | Teruaki Hayashi<br>Naoki Watanabe<br>Hiroki Sakaji |
| 16:30-18:00 | Glacier         | Special Session: Federated Learning on Big Data  | Francesco Piccialli                                |
| 16:30-18:00 | Congressional C | Special Session: Machine Learning on Big<br>Data   | Alfredo Cuzzocrea                                  |
| 16:30-18:00 | Sequoia         | Special session: Privacy and Security of Big Data  | Alfredo Cuzzocrea                                  |
| 19:00-21:00 |                 | OC Business Meeting  |  |

|             |                                 | Day 3: Tuesday, December 17, 2024  |                    |
|-------------|---------------------------------|--|--------------------|
| 8:30-17:00  |                                 | Registration (Regency Foyer)   |                    |
| 8:30-9:00   |                                 | PhD Forum Poster Setup   |                    |
| 9:00-10:00  |                                 | Keynote Speech II f. Cornelia Caragea, USA and U. of Illinois Coving Semi-Supervised Learning with Ps Location: Regency Ballroom   |                    |
| 10:00-10:30 | Columbia Foyer                  | Coffee Break   |                    |
| 10:00-10:30 | Regency Foyer<br>Columbia Foyer | PhD Forum Poster D<br>(Session Chairs: Feng Chen,  |                    |
| Time        | Location                        | Session/Workshop   | Session Chair      |
| 10:30-12:00 | Regency<br>Ballroom             | Panel B: Big Data and AI – Shaping the Next Frontier of Data-Driven Intelligence   | Lindi Liao         |
| 10:30-12:30 | Capitol A                       | D2S1: Foundation Models and Analytics  | Dawei Zhou         |
| 10:30-12:30 | Capitol B                       | D2S2: Learning from Complex Data   | Yong Zhuang        |
| 10:30-12:30 | Columbia A                      | D2S3: Big Data Infrastructure II   | Yanjie Fu          |
| 10:30-12:30 | Columbia B                      | D2S4: Big Data Science and Foundations II  | Fang Jin           |
| 10:30-12:30 | Congressional A                 | D2S5: Big Data Search and Mining II  | Kaiqun Fu          |
| 10:30-12:30 | Congressional B                 | D2S6: Big Data Applications IV   | Kunpeng Liu        |
| 8:15-17:00  | Congressional D                 | Workshop #1: 9th Computational Archival Science (CAS) Workshop  Website: <a href="https://ai-collaboratory.net/cas/cas-workshops/2024-9th-cas-workshop/">https://ai-collaboratory.net/cas/cas-workshops/2024-9th-cas-workshop/</a> | Mark Hedges        |
| 10:30-12:30 | Columbia C                      | I&G-4: Business and Energy   | Kesheng Wu         |
| 10:30-12:30 | Yosemite                        | Special Session: Synergizing Mobility Data for Creating and Discovering Valuable Places  | Yukio Ohsawa       |
| 10:30-12:30 | Grand Teton                     | Special Session: Social Cognitive<br>Computing in Digital Education and<br>Learning  | Jerry Chun-Wei Lin |

| 10:30-12:30 | Glacier                         | Special session: Privacy and Security of Big Data  | Alfredo Cuzzocrea      |
|-------------|---------------------------------|--|------------------------|
| 10:30-11:30 | Concord                         | PhD Forum: Paper Session   | Feng Chen, Shuhan Yuan |
| 11:30-12:30 | Concord                         | PhD Forum Panel:<br>Beyond the Dissertation: Insights into<br>Academic and Industry Careers  | Feng Chen              |
| 12:30-14:00 |                                 | Lunch  |                        |
| 14:30-16:00 | Regency<br>Ballroom             | Panel: Federal Big Data Initiatives and Activities   | Liping Di              |
| 14:00-16:00 | Capitol A                       | D2S7: Multimodal and Scalable Big Data   | Lindi Liao             |
| 14:00-16:00 | Capitol B                       | D2S8: Link and Graph Mining I  | Zhiqian Chen           |
| 14:00-16:00 | Columbia A                      | D2S9: Machine Learning Algorithms II   | Hefei Qiu              |
| 14:00-16:00 | Yosemite                        | Special Session: Synergizing Mobility Data for Creating and Discovering Valuable Places  | Yukio Ohsawa           |
| 14:00-16:00 | Grand Teton                     | Special Session: Data-Driven Designation and Implementation of Automated Guided Vehicles   | Jerry Chun-Wei Lin     |
| 14:00-16:00 | Glacier                         | Special session: Privacy and Security of Big Data  | Alfredo Cuzzocrea      |
| 14:00-17:30 | Concord                         | PhD Forum: Paper Session   | Feng Chen, Shuhan Yuan |
| 14:00-18:00 | Yellowstone                     | Workshop #10: International Workshop on Data Engineering and Modeling for AI (DEMAI)  Website: <a href="https://www2.cs.uh.edu/~dss/DEMAI/home.html">https://www2.cs.uh.edu/~dss/DEMAI/home.html</a> | Carlos Ordonez         |
| 16:00-16:30 | Columbia Foyer                  | Coffee Break   |                        |
| 16:00-16:30 | Regency Foyer<br>Columbia Foyer | PhD Forum Poster I<br>(Session Chairs: Feng Chen,  | •                      |
| 16:30-17:00 | Regency<br>Ballroom             | Sponsor Session: IEEE  | E Dataport             |
| 17:30-18:30 |                                 | Walk to the National Museum of t<br>4th St. & Independence Ave. SW V   |                        |

| American Indian Social Program |
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|             | Day 4: Wednesday, December 18, 2024     |   |                  |  |
|-------------|---|---|------------------|--|
| 8:30-13:30  | 8:30-13:30 Registration (Regency Foyer) |   |                  |  |
| 9:00-10:00  |   | Keynote Speech III Prof. Alexander "Sasha" Rush, Cornell Tech, USA Designing Text Embeddings for the Future Location: Regency Ballroom  |                  |  |
| 10:00-10:30 | Columbia Foyer                          | Coffee Break  |                  |  |
| Time        | Location                                | Session/Workshop  | Session Chair    |  |
| 10:30-12:30 | Capitol A                               | D3S1: Link and Graph Mining II  | Zhiqian Chen     |  |
| 10:30-12:30 | Capitol B                               | D3S2: Machine Learning Algorithms III   | Hefei Qiu        |  |
| 10:30-12:30 | Columbia A                              | I&G-5: Recommender Systems  | Kesheng Wu       |  |
| 10:30-12:30 | Columbia B                              | I&G-6: Al4Science   | Lulwah AlKulaib  |  |
| 8:30-12:30  | Columbia C                              | Workshop #24: 2nd International Workshop on Big Data Analytics with Artificial Intelligence for Climate Change  Website: https://66c87495361cdf77d1e6ad36brilliant-beijinho-c4610a.netlify.app/ Online meeting link: https://teams.live.com/dl/launcher/launcher.html?url=%2F_%23%2Fmeet%2F933444250793%3Fp%3DBfwD2fMllvyl1Rwkgp%26anon%3Dtrue&type=meet&deeplinkld=329af25e-e2ec-4e8c-a64c-8c3168a33f4d&directDl=true&msLaunch=true&enableeMobilePage=true&suppressPrompt=true | Rajiv Misra      |  |
| 10:30-16:00 | Congressional A                         | Special Session: HealthCare Data  | Ozgun Pinarer    |  |
| 10:30-12:30 | Congressional B                         | Special Session: Dataspaces and DFFT (Data Free Flow with Trust)  | Noboru Koshizuka |  |
| 10:30-12:30 | Yosemite                                | Special Session: Synergizing Mobility<br>Data for Creating and Discovering<br>Valuable Places   | Yukio Ohsawa     |  |
| 12:30-14:00 |   | Lunch   |                  |  |
| 13:00-13:30 | Regency<br>Ballroom                     | Closing Ceremo  | ny               |  |

## **Main Conference Paper Sessions**

| ID          | Title D1S4: Big Data Science and  | Authors  | Type (Red indicates an online video presentation, not played in the conference room. Access it via the prerecorded video link in the conference program.)  Red: Online video presentation (not |
|-------------|---|--|--|
|             | Foundations I   |  | played in room). Access via program link.  |
|             | Luckiness Normalized Maximum Likelihood-based   |  |  |
| BigD<br>400 | Change Detection for High-dimensional Graphical Models with Missing Data                      | Zhongyi Que, Linchuan<br>Xu, and Kenji Yamanishi   | Regular  |
| BigD        |   | Lamine Diop and Marc   |  |
| 587         | Scalable Sampling for High Utility Patterns   | Plantevit  | Short  |
| BigD        |   | Tanvir Ahmed Khan and  |  |
| 419         | A Planner for Scalable Tensor Programs  | Leonidas Fegaras   | Regular  |
|             |   | Ling Cheng, Qian Shao,   |  |
| BigD        | A Full-History Network Dataset for BTC Asset  | Fengzhu Zeng, and Feida  |  |
| 462         | Decentralization Profiling  | Zhu  | Regular  |
| BigD<br>592 | Synthetic Data Generation for Photovoltaic Systems:<br>Enhancing Accuracy with the Huld Model | Ali AGHAZADEH ARDEBILI, Andreas LIVERA, Antonella Longo, George E. GEORGHIOUS, and Antonio FICARELLA | Short  |
| BigD        | An Efficient Single-pass Online Computation of  | Anton Kochepasov and   |  |
| 638         | Higher-Order Bivariate Statistics   | Ilya Stupakov  | Short  |
| BigD        | Faster Sampling Algorithms for Polytopes with Small   | Yekun Ke, Xiaoyu Li, Zhao  | _  |
| 344         | Treewidth   | Song, and Tianyi Zhou  | Regular  |
| BigD        | DyMGCN: Dynamic Multi-Graph Convolution   | Hexiang Liu, Qilong Han,<br>Jingyu Sheng, Dan Lu,<br>Shanshan Sui, and Hui                           |  |
| 310         | Networks for Spatio-Temporal Forecasting  | Sun  | Short  |
|             | D2S4: Big Data Science and Foundations II   |  | Red: Online video<br>presentation (not<br>played in room).<br>Access via program<br>link.  |
| BigD        | DDC: A Congris Descripting Pottorne Complex   | Lamine Diop, Marc<br>Plantevit, and Arnaud<br>Soulet   | Chart  |
| 665         | RPS: A Generic Reservoir Patterns Sampler   | Somer  | Short  |

| BigD        | Fairness in Monotone \$k\$-submodular   | Yanhui Zhu, Samik Basu,             |                                    |
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| 786         | Maximization: Algorithms and Applications   | and A. Pavan                        | Short                              |
| BigD        |   | Poonam Sharma, Dildar               |                                    |
| 844         | Minimizing Regret in Social Media Advertisement   | Ali, and Suman Banerjee             | Short                              |
|             |   | Chongyu He, Zhiwu Xie,              |                                    |
| BigD        | Nuclear Pore Segmentation in 3D FIB-SEM Images  | Yinlin Chen, and Edward             |                                    |
| 778         | with Dynamic Cyclical Data Augmentation   | Fox                                 | Short                              |
| D:D         | Figure 4 7: Convert time I Network for Mildfine   | Yuzhou Chen, Joel                   |                                    |
| BigD        | Firecast Zigzag Convolutional Network for Wildfire  | Castillo, Huikyo Lee, and           | Chaut                              |
| 793         | Prediction  | Yulia R. Gel                        | Short                              |
| BigD<br>693 | Disentangled Conditional Variational Autoencoder for Unsupervised Anomaly Detection           | Asif Ahmed Neloy and Maxime Turgeon | Short                              |
| 093         | for offsupervised Afformary Detection   | Hiroki Hasegawa,                    | SHOLL                              |
|             | Proposing a Low-Rank Approximation Method with  | Kazuyoshi Yata, Yukihiko            |                                    |
| BigD        | Mathematical Guarantees for High-Dimensional  | Okada, and Jun                      |                                    |
| 593         | Tensor Data   | Kunimatsu                           | Regular                            |
| BigD        | Learning with Sparsely Permuted Data: A Robust  | Abhisek Chakraborty and             |                                    |
| 439         | Bayesian Approach   | Saptati Datta                       | Regular                            |
|             | - to your product   | Xinran Wang, Qi Le,                 | - Together                         |
| BigD        | ICL: An Incentivized Collaborative Learning   | Ahmad Khan, Jie Ding,               |                                    |
| 546         | Framework   | and Ali Anwar                       | Regular                            |
|             |   | Junda Wang, Weijian Li,             | _                                  |
|             |   | Han Wang, Hanjia Lyu,               |                                    |
|             |   | Caroline Thirukumaran,              |                                    |
| BigD        | CRTRE: Causal Rule Generation with Target Trial   | Addisu Mesfin, Hong Yu,             |                                    |
| 741         | Emulation Framework   | and Jiebo Luo                       | Short                              |
|             |   | Yichuan Deng, Zhihang Li,           |                                    |
| BigD        | Zero-th Order Algorithm for Softmax Attention   | Sridhar Mahadevan, and              |                                    |
| 518         | Optimization  | Zhao Song                           | Regular                            |
|             | [Vision Paper] Visual Summary Thought of Large  | Yuqing Liu, Yu Wang,                |                                    |
| BigD        | Vision-Language Models for Multimodal   | Yuwei Cao, Lichao Sun,              |                                    |
| 821         | Recommendation  | and Philip Yu                       | Short                              |
| BigD        | Optimal Scheduling Algorithms for Cost-Effective  | Liudong Zuo, Pan Lai, and           | Chaut                              |
| 887         | Bandwidth Reservation in HPNs   | Zhong Chen                          | Short                              |
| BigD<br>812 | Unsupervised Domain Adaptation for Entity Blocking Leveraging Large Language Models           | Yaoshu Wang and Mengyi<br>Yan       | Short                              |
| 017         | Leveraging Large Language Mouers  | Mohammad Hossein                    | SHULL                              |
|             |   | Moslemi, Harini                     |                                    |
| BigD        |   | Balamurugan, and                    |                                    |
| 709         | Evaluating Blocking Biases in Entity Matching   | Mostafa Milani                      | Regular                            |
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| RigD        | Stochastic Large scale Machine Learning Algerithms  | Biyi Fang, Diego Klabjan,           | link.                              |
| BigD<br>240 | Stochastic Large-scale Machine Learning Algorithms with Distributed Features and Observations | and Truong Vo                       | Regular                            |
| <b>4</b> 0  | שונוז שואטוואטווט ווייט מווע טאארואטוואטווא   | and Huong VO                        | negulai                            |

|      |  | Hooyoung Ahn,                           |                                     |
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|      |  | Seonyoung Kim, Yoomi                    |                                     |
|      |  | Park, Woojong Han,                      |                                     |
|      |  | Shinyoung Ahn, Tu Tran,                 |                                     |
|      |  | Bharath Ramesh, Hari                    |                                     |
| BigD | MPI Allgather Utilizing CXL Shared Memory Pool in    | Subramoni, and                          |                                     |
| 255  | Multi-Node Computing Systems                         | Dhabaleswar K. Panda                    | Short                               |
| BigD | Large-Scale Knowledge Graph Embeddings in            | Bedirhan Gergin and                     |                                     |
| 313  | Apache Spark   | Charalampos Chelmis                     | Regular                             |
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| BigD | Key Compression Limits for \$k\$-Minimum Value       | Charlie Dickens, Eric Bax,              |                                     |
| 329  | Sketches   | and Alexander Saydakov                  | Short                               |
|      |  | Dat Nguyen, Muhammad                    |                                     |
| BigD | Cachelt: Application-Agnostic Dynamic Caching for    | Rafid, Nathanael Santoso,               |                                     |
| 314  | Big Data Analytics                                   | and Khanh Nguyen                        | Regular                             |
|      |  | Arsème Vadèle Djeufack                  |                                     |
| BigD | Optimizing Privacy While Limiting Information Loss   | Nanfack, Gaël Le Mahec,                 |                                     |
| 373  | in Distributed Data Anonymization                    | and Gilles Dequen                       | Short                               |
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|      | D2S3: Big Data Infrastructure II                     |   | presentation (not                   |
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|      |  |   | link.                               |
|      |  | Shinyoung Ahn,                          |                                     |
|      |  | Sookwang Lee,                           |                                     |
| BigD | Efficient Data-parallel Distributed DNN Training for | Hyeonseong Choi, and                    |                                     |
| 320  | Big Dataset under Heterogeneous GPU Cluster          | Jaehyun Lee                             | Regular                             |
| BigD | DBRepo: A Data Repository System for Research        | Martin Weise and                        | ga.a.                               |
| 569  | Data in Databases                                    | Andreas Rauber                          | Regular                             |
|      |  | Luke Schultz, Owen                      | педии                               |
| BigD | Common Pitfalls with Data Deduplication              | ·                                       | Decider                             |
| 423  | Parameters and Metrics                               | Randall, and Paul Lu                    | Regular                             |
| BigD | Distributed Data Analysis Workflow System across     | Siwoon Son, Seong-Hwan                  |                                     |
| 735  | Multiple Data Hubs                                   | Kim, and Heesun Won                     | Short                               |
| BigD | Durin: CPU-FPGA Heterogeneous Platform for           | Se-Min Lim, Esmerald                    |                                     |
| 586  | Scalable Low-Dimensional Data Clustering             | Aliaj, and Sang-Woo Jun                 | Short                               |
|      |  | Iason Ofeidis, Diego                    |                                     |
| BigD | An Overview of the Data-Loader Landscape:            | Kiedanski, and Leandros                 |                                     |
| 611  | Comparative Performance Analysis                     | Tassiulas                               | Short                               |
| BigD | ,  | Connor Howe, Mohsin                     |                                     |
| 547  | Towards Scalable Quantum Repeater Networks           | Aziz, and Ali Anwar                     | Short                               |
|      | Improving Data Science Applications with a Visual    | Lucas Miguel Ponce and                  | SHOLL                               |
| BigD |  | _                                       | Pogular                             |
| 461  | Cross-Platform Execution Environment                 | Dorgival Guedes                         | Regular Red: Online video           |
|      | D1S5: Big Data Management I                          |   | presentation (not                   |
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|      |  |   | Access via program link.            |
| RigD | Towards True Multi-interest Recommendation:          | Jaeri Lee, Jeongin Yun,                 | III IX.                             |
| BigD |  |   | Dogular                             |
| 447  | Enhanced Scheme for Balanced Interest Training       | and U Kang                              | Regular                             |
| BigD | Uncertainty-Aware Influence Maximization:            | Qi Zhang, Lance Kaplan,                 |                                     |
| 823  | Enhancing Propagation in Competitive Social          | Audun Jøsang, Dong                      | Short                               |

|      | Networks with Subjective Logic                         | Hyun Jeong, Feng Chen,     |                                     |
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|      |  | and Jin-Hee Cho            |                                     |
|      | Scalable Big Spatial Data Processing with SQL Query    | Rahul Sahni, Xiaozheng     |                                     |
| BigD | Compilation and Distributed Morsel-driven              | Zhang, Sudip Chatterjee,   |                                     |
| 722  | Parallelism  | and Suprio Ray             | Regular                             |
|      |  | Mozhgan Karimi, Len        |                                     |
| BigD | Session-based News Recommendation Using                | Feremans, Boris Cule, and  |                                     |
| 508  | Cohesive Patterns                                      | Bart Goethals              | Short                               |
|      |  | Zhong Chen, Yi He, Di Wu,  |                                     |
|      | \$\ell {1,2}\$-Norm and CUR Decomposition based        | Liudong Zuo, Keren Li,     |                                     |
| BigD | Sparse Online Active Learning for Data Streams with    | Wenbin Zhang, and          |                                     |
| 695  | Streaming Features                                     | Zhiqiang Deng              | Regular                             |
|      |  | Antheas Kapenekakis,       | J                                   |
|      |  | Daniele Dell'Aglio,        |                                     |
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|      |  | Laurids Poulsen, Martin    |                                     |
|      |  | Bøgsted, Minos             |                                     |
| BigD | Synthesizing Accurate Relational Data under            | Garofalakis, and Katja     |                                     |
| 644  | ,  | Hose                       | Short                               |
| 044  | Differential Privacy                                   |                            | SHOLL                               |
|      |  | Liangwei Yang, Zhiwei Liu, |                                     |
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| BigD | Personalized Multi-task Training for Recommender       | Huan Wang, Caiming         |                                     |
| 265  | System   | Xiong, and Philip S. Yu    | Regular                             |
|      |  | Nicolas Blumenröhr,        |                                     |
| BigD | Vision Paper: FAIR Digital Objects for Realising       | Philipp-Joachim Ost, Felix |                                     |
| 589  | Globally Aligned Data Spaces                           | Kraus, and Achim Streit    | Regular                             |
|      |  | Zhuohan Xu, Dejun Teng,    |                                     |
| BigD | Understanding the Intrinsic Characteristics of Spatial | Zhaohui Peng, and          |                                     |
| 370  | Partitioning in Distributed Spatial Join               | Fusheng Wang               | Regular                             |
|      | Leveraging LLMs for Fair Data Labeling and             | Ibrahim Mohamed            |                                     |
| BigD | Validation in Crowdsourcing Environments [Vision       | Serouis and Florence       |                                     |
| 312  | paper]   | Sèdes                      | Short                               |
|      | , , ,  | Mao-Lin Li, K. Selçuk      |                                     |
| BigD |  | Candan, and Maria Luisa    |                                     |
| 433  | Causally Informed Factorization Machines               | Sapino                     | Short                               |
| 133  | causary informed ructorization muchines                | Zhenrui Yue, Huimin        | 5010                                |
| BigD | Transferable Sequential Recommendation via Vector      | Zeng, Yang Zhang, Julian   |                                     |
| 420  | Quantized Meta Learning                                | McAuley, and Dong Wang     | Short                               |
| 420  |  | ivicauley, and bong wang   | Red: Online video                   |
|      | D1S6: Big Data Search and Mining I                     |                            | presentation (not                   |
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|      |  | Srivatsa Mallapragada,     |                                     |
|      | Multi-Modality Transformer for E-Commerce:             | Ying Xie, Varsha Rani      |                                     |
| BigD | Inferring User Purchase Intention to Bridge the        | Chawan, Zeyad Hailat,      |                                     |
| 267  | Query-Product Gap                                      | and Yuanbo Wang            | Regular                             |
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| BigD On Modeling Adaptive Index Management as Adversarial Search  Bin Dong, Avinash Nayak, Kesheng Wu, Verónica Rodríguez Tribaldos, Jonathan Ajo-Franklin, Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda BigD GNN-Based Persistent K-core Community Search in Temporal Graphs  Reg  | gular<br>gular<br>gular            |
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| Adversarial Search  Otto, and Stefan Dessloch  Bin Dong, Avinash Nayak,  Kesheng Wu, Verónica  Rodríguez Tribaldos,  Jonathan Ajo-Franklin,  Qile Zhang, Suren Byna,  Fan Guo, Patrick Dobson,  and Alexander Sim  Zongli Jiang, Yirui Tan,  Guoxin Chen, Fangda  BigD GNN-Based Persistent K-core Community Search in  383 Temporal Graphs  Otto, and Stefan Dessloch  Reg  Bin Dong, Avinash Nayak,  Kesheng Wu, Verónica  Rodríguez Tribaldos,  Jonathan Ajo-Franklin,  Qile Zhang, Suren Byna,  Fan Guo, Patrick Dobson,  and Alexander Sim  Zongli Jiang, Yirui Tan,  Guoxin Chen, Fangda  Guo, Jinli Zhang, and  Xiaolu Bai  Reg |                                    |
| Bin Dong, Avinash Nayak, Kesheng Wu, Verónica Rodríguez Tribaldos, Jonathan Ajo-Franklin, Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Reg Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda BigD GNN-Based Persistent K-core Community Search in 383 Temporal Graphs Rin Dong, Avinash Nayak, Kesheng Wu, Verónica Rodríguez Tribaldos, Jonathan Ajo-Franklin, Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Reg Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda Guo, Jinli Zhang, and Xiaolu Bai Reg  |                                    |
| Kesheng Wu, Verónica Rodríguez Tribaldos, Jonathan Ajo-Franklin, Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda BigD GNN-Based Persistent K-core Community Search in 383 Temporal Graphs  Kesheng Wu, Verónica Rodríguez Tribaldos, Jonathan Ajo-Franklin, Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda Guo, Jinli Zhang, and Xiaolu Bai Reg   | gular                              |
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| BigD 317 TensorSearch: Parallel Similarity Search on Tensors  BigD GNN-Based Persistent K-core Community Search in 383 Temporal Graphs  Qile Zhang, Suren Byna, Fan Guo, Patrick Dobson, and Alexander Sim Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda Guo, Jinli Zhang, and Xiaolu Bai Reg   | gular                              |
| BigD TensorSearch: Parallel Similarity Search on Tensors TensorSearch: Parallel Similarity Search on Tensors and Alexander Sim Reg Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda BigD GNN-Based Persistent K-core Community Search in Temporal Graphs Xiaolu Bai Reg  | gular                              |
| 317 TensorSearch: Parallel Similarity Search on Tensors and Alexander Sim Zongli Jiang, Yirui Tan, Guoxin Chen, Fangda BigD GNN-Based Persistent K-core Community Search in 383 Temporal Graphs Xiaolu Bai Reg   | gular                              |
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| BigD GNN-Based Persistent K-core Community Search in 383 Temporal Graphs Guoxin Chen, Fangda Guo, Jinli Zhang, and Xiaolu Bai Reg  |                                    |
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| BigD fast space division and trustworthy sampling space Yi Deng, Min Wu, and Yan   |                                    |
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| Jingfan Meng, Huayi  |                                    |
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| BigD Automated Polynomial Filter Learning for Graph Wendi Yu, Zhichao Hou,   |                                    |
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| BigD<br>836 | A machine-learning pipeline for merging and georeferencing very large archives of historical aerial photographs | Eugenio Noda, Luna<br>Huang, Trinetta Chong,<br>Shruti Jain, Andreas<br>Madestam, Anna<br>Tompsett, Hannah<br>Druckenmiller, and<br>Solomon Hsiang | Regular   |
| BigD<br>759 | Custom Accessors: Enabling Scalable Data Ingestion, (Re-)Organization, and Analysis on Distributed Systems      | Vito Giovanni Castellana,<br>Burcu Mutlu, Ian Di Dio<br>Lavore, Jesun Firoz,<br>Katherine Wolf, Marco<br>Minutoli, and John Feo                    | Regular   |
| BigD<br>711 | Efficient Point-to-Subspace ANNS in Manhattan and Lp Space by LSH Pruning                                       | Jingfan Meng, Huayi<br>Wang, and Jun Xu  | Regular   |
| BigD        | QualityNet: Error-bounded Lossy Compression   | Khondoker Mirazul<br>Mumenin, Dong Dai,<br>Jinzhen Wang, and Sheng   |   |
| 779         | Quality Prediction via Deep Surrogate   | Di<br>Rubayet Rahman Rongon,   | Regular   |
| BigD<br>811 | A Study of Data-Path Bugs in PyTorch with a Focus on Memory Management  | Chen Cao, and Xuechen<br>Zhang   | Regular   |
| BigD<br>867 | Evaluating Text Summarization Techniques and Factual Consistency with Language Models                           | Md Moinul Islam, Usman<br>Muhammad, and Mourad<br>Oussalah   | Short   |
| BigD        | SAFENet: Towards a Robust Suicide Assessment  | Usman Naseem,<br>Surendrabikram Thapa,<br>Siddhant Shah,<br>Mohammad Salman, Qi<br>Zhang, Junaid Rashid,<br>Liang Hu, and Imran                    |   |
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| BigD<br>394 | A Novel Reverse Random Hyperplane Projection<br>Scheme and Its Effect on Mining Sensor Streams                  | Antonios Skevis, George<br>Klioumis, and Nikos<br>Giatrakos  | Short   |
| BigD<br>770 | ID and Graph View Contrastive Learning with Multi-View Attention Fusion for Sequential Recommendation           | Xiaofan Zhou and Kyumin<br>Lee   | Regular   |
| BigD        | Monarch: Distributed Butterfly Counting for   | Yuxin Tang, Mangesh  | Short   |

| 410         | Large-scale Bipartite Graph   | Bendre, and Mahashweta<br>Das  |   |
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| BigD<br>421 | Enhancing Discoverability and Management of Atmospheric Data at Scale: Solutions from the ARM Data Center                   | Chirag Shah, Wade<br>Darnell, Hannah Collier,<br>Harold Shanafield,<br>Michael Giansiracusa,<br>and Giri Prakash           | Short   |
| BigD<br>436 | Beyond Quantile Methods: Improved Top-K<br>Threshold Estimation for Traditional and Learned<br>Sparse Indexes               | Jinrui Gou, Yifan Liu,<br>Minghao Shao, and<br>Torsten Suel  | Short   |
| BigD<br>520 | KG-CF: Knowledge Graph Completion with Context<br>Filtering under the Guidance of Large Language<br>Models                  | Zaiyi Zheng, Yushun<br>Dong, Song Wang,<br>Haochen Liu, Qi Wang,<br>and Jundong Li   | Short   |
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| BigD<br>494 | Federated Contrastive Learning of Graph-Level Representations   | Xiang Li, Gagan Agrawal,<br>Rajiv Ramnath, and<br>Ruoming Jin  | Short   |
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| BigD<br>652 | Norma: A Framework for Finding Threshold<br>Associations Between Continuous Variables Using<br>Point-wise Functions         | Md Mahin and Christoph<br>F Eick   | Short   |
| BigD<br>321 | Enhancing Graph Neural Networks with Limited<br>Labeled Data by Actively Distilling Knowledge from<br>Large Language Models | Quan Li, Tianxiang Zhao,<br>Lingwei Chen, Junjie Xu,<br>and Suhang Wang  | Short   |
| BigD<br>681 | Feature Interaction Detection in Big Data Through a New Choquet Integral based Deep Neural Network                          | Matthew Fried, Honggang<br>Wang, and Hua Fang  | Short   |
| BigD<br>682 | Explainable Enrichment-Driven GrAph Reasoner (EDGAR) for Large Knowledge Graphs with Applications in Drug Repurposing       | Olawumi Olasunkanmi,<br>Evan Morris, Yaphet<br>Kebede, Harlin Lee,<br>Stanley Ahalt, Alexander<br>Tropsha, and Chris Bizon | Short   |
| BigD<br>747 | Evaluating Performance Trade-offs of Caching<br>Strategies for Al-Powered Querying Systems                                  | Hyunju Oh, Wei Zhang,<br>Christopher Rickett,<br>Sreenivas R. Sukumar,<br>and Suren Byna                                   | Short   |
| BigD<br>882 | [Vision Paper] Next Topic Recommendation for Influencers on Social Media  | Masafumi Iwanaga, Keishi<br>Tajima, and Yoko<br>Yamakata   | Short   |
| BigD<br>851 | WalkBayes: Robust Node Classification via Bayesian Inference and Random Walks under Perturbations                           | Shuqi He and Jun Song  | Short   |
| BigD<br>873 | Efficient counting of balanced (2, k)-bicliques in Signed Bipartite Graphs  | Mekala Kiran, Apurba<br>Das, and Suman Banerjee  | Short   |

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|             | Data  |   | played in room).<br>Access via program                      |
| BigD<br>497 | Benchmarking Human and Automated Prompting in   | Jorge Quesada, Zoe<br>Fowler, Mohammad<br>Alotaibi, Mohit<br>Prabhushankar, and<br>Ghassan AlRegib  | Pogular   |
| 497         | the Segment Anything Model  | Jawad Ibn Ahad, Rafeed<br>Mohammad Sultan,<br>Abraham Kaikobad, Fuad<br>Rahman, Mohammad<br>Ruhul Amin, Nabeel                                      | Regular   |
| BigD<br>636 | Empowering Meta-Analysis: Leveraging Large Language Models for Scientific Synthesis   | Mohammed, and Shafin<br>Rahman  | Regular   |
| BigD        | Prompt Chaining-Assisted Malware Detection: A Hybrid Approach Utilizing Fine-Tuned LLMs and Domain Knowledge-Enriched Cybersecurity | Neha Mohan Kumar,<br>Fahmida Tasnim Lisa, and<br>Sheikh Rabiul Islam  | Chart   |
| 646         | Knowledge Graphs  | Sikun Guo, Amir   | Short   |
| BigD        | [Vision Paper] Embracing Foundation Models for  | Shariatmadari, Guangzhi   |   |
| 491         | Advancing Scientific Discovery  | Xiong, and Aidong Zhang   | Regular   |
| BigD        | Automatic Prompt Generation and Optimization by Leveraging Large Language Models to Enhance   |   |   |
| 216         | Few-Shot Learning in Biomedical Tasks   | Yiwen Shi and Xiaohua Hu  | Regular   |
| BigD<br>774 | Resources Construction and LLM Fine-tuning for<br>Education of Computer Science   | Bingjiao Wang, Qinglei<br>Zeng, and Yong Zhang  | Regular   |
|             | D2S1: Foundation Models and   |   | Red: Online video   |
|             | Analytics   | 3 (Best Paper Award)  | presentation (not played in room). Access via program link. |
| BigD<br>889 | BanglaDialecto: An End-to-End AI-Powered Regional<br>Speech Standardization   | Md. Nazmus Sadat Samin,<br>Jawad Ibn Ahad, Tanjila<br>Ahmed Medha, Fuad<br>Rahman, Mohammad<br>Ruhul Amin, Nabeel<br>Mohammed, and Shafin<br>Rahman | Regular   |
| BigD        | Performance Characterization of Expert Router for   | Josef Pichlmeier, Philipp   |   |
| 647         | Scalable LLM Inference  | Ross, and Andre Luckow  | Short   |
| BigD<br>827 | Data Augmentations to support Speculative Reasoning in LLMs   | Raquib Bin Yousuf,<br>Nicholas Defelice,<br>Mandar Sharma,<br>Shengzhe Xu, and Naren<br>Ramakrishnan  | Regular (Best<br>Paper Award)                               |
| BigD        | TabularFM: An Open Framework For Tabular  | Quan Tran, Suong Hoang,   |   |
| 440         | Foundational Models   | Lam Nguyen, Dzung Phan,   | Short   |

|             |  | and Thanh Lam Hoang                          |                                     |
|-------------|--|--|-------------------------------------|
|             |  | Hongjie Chen, Ryan Rossi,                    |                                     |
|             |  | Sungchul Kim, Kanak                          |                                     |
| BigD        | A Study of Foundation Models for Large-scale   | Mahadik, and Hoda                            |                                     |
| 252         | Time-series Forecasting  | Eldardiry                                    | Short                               |
|             |  | Amrita Bhattacharjee,                        |                                     |
| BigD        | Zero-shot LLM-guided Counterfactual Generation: A  | Raha Moraffah, Joshua                        |                                     |
| 852         | Case Study on NLP Model Evaluation   | Garland, and Huan Liu                        | Short                               |
| D:-D        | Ct. de De ce A De ce de cere de Detecet fe a Decembra De cere cere                         | Shenyang Liu, Yang Gao,                      |                                     |
| BigD        | StyleRec: A Benchmark Dataset for Prompt Recovery  | Shaoyan Zhai, and Liqiang                    | Chaut                               |
| 816<br>BigD | in Writing Style Transformation  | Wang   | Short                               |
| BigD<br>507 | Beyond Human Vision: The Role of Large Vision Language Models in Microscope Image Analysis | Prateek Verma, Minh-Hao                      | Short                               |
| 507         | Language Models in Microscope image Analysis   | Van, and Xintao Wu                           | SHOLL                               |
|             |  | Azal Ahmad Khan, Sayan<br>Alam, Xinran Wang, |                                     |
|             |  | Ahmad Faraz Khan,                            |                                     |
| BigD        | Mitigating Sycophancy in Large Language Models via   | Debanga Raj Neog, and                        |                                     |
| 866         | Direct Preference Optimization   | Ali Anwar                                    | Short                               |
| 000         | Direct Pererence Optimization  | Jinlin Wu, Xusheng Liang,                    | Shore                               |
| BigD        | SurgBox: Agent-Driven Operating Room Sandbox   | Xuexue Bai, and Zhen                         |                                     |
| 872         | with Surgery Copilot   | Chen   | Short                               |
|             |  | Azal Ahmad Khan, Ahmad                       |                                     |
| BigD        | Personalized Federated Learning Techniques:  | Faraz Khan, Haidar Ali,                      |                                     |
| 835         | Empirical Analysis   | and Ali Anwar                                | Short                               |
|             | D1S7: Data Ecosystem   |  | Red: Online video presentation (not |
|             |  |  | played in room).                    |
|             |  |  | Access via program link.            |
| BigD        | Calibrating Practical Privacy Risks for Differentially                                     | Yuechun Gu and Keke                          |                                     |
| 818         | Private Machine Learning   | Chen   | Regular                             |
|             |  | Emanuela Marasco, Nora                       |                                     |
| BigD        | Vision Paper: Are Identity Verification Systems  | McDonald, and Vivian                         |                                     |
| 238         | Adequately Tailored for Neurodiverse Individuals?  | Genaro Motti                                 | Short                               |
|             |  | Alycia Noel Carey, Karuna                    |                                     |
| BigD        | DP-TabICL: In-Context Learning with Differentially   | Bhaila, Kennedy                              |                                     |
| 330         | Private Tabular Data   | Edemacu, and Xintao Wu                       | Short                               |
|             |  | Eray Dogan, Meghdad                          |                                     |
| BigD        | SecureSphere: Advancing Security and Robustness in   | Mirabi, and Carsten                          |                                     |
| 350         | Query Processing over Outsourced Data  | Binnig                                       | Short                               |
| BigD        | XSub: Explanation-Driven Adversarial Attack against  | Kiana Vu, Phung Lai, and                     |                                     |
| 736         | Black-box Classifiers via Feature Substitution   | Truc Nguyen                                  | Short                               |
| BigD        | Factify: An Automated Fact-Checker for Web   | Ademola Adesokan and                         |                                     |
| 746         | Information  | Shady Elbassuoni                             | Short                               |
| BigD        | Reconsider Time Series Analysis for Insider Threat   | Chia-Cheng Chen and                          |                                     |
| 885         | Detection  | Hsing-Kuo Pao                                | Short                               |

|             |  | Jiaxiang Tang, Zeshan                           |                                    |
|-------------|--|---|------------------------------------|
|             |  | Fayyaz, Mohammad                                |                                    |
|             | HERL: Tiered Federated Learning with Adaptive                                  | Salahuddin, Raouf                               |                                    |
| BigD        | Homomorphic Encryption using Reinforcement                                     | Boutaba, Zhi-Li Zhang,                          |                                    |
| 716         | Learning   | and Ali Anwar                                   | Short                              |
| BigD        | Challenging Fairness: A Comprehensive Exploration                              | Shahnewaz Karim Sakib                           |                                    |
| 761         | of Bias in LLM-Based Recommendations   | and Anindya Bijoy Das                           | Short                              |
|             |  | Peiyu Li, Omar Bahri,                           |                                    |
|             |  | Soukaina Filali                                 |                                    |
| BigD        | Reliable Time Series Counterfactual Explanations                               | Boubrahimi, and Shah                            |                                    |
| 808         | Guided by ShapeDBA   | Muhammad Hamdi                                  | Short                              |
|             |  | Paramita Das, Sai                               |                                    |
|             |  | Keerthana Karnam,                               |                                    |
| BigD        | Social Biases in Knowledge Representations of                                  | Aditya Soni, and Animesh                        |                                    |
| 843         | Wikidata separates Global North from Global South                              | Mukherjee                                       | Short                              |
|             |  | Xuan Zhao, Simone                               |                                    |
|             |  | Fabbrizzi, Paula Reyero                         |                                    |
|             |  | Lobo, Siamak Ghodsi,                            |                                    |
| D: D        |  | Klaus Broelemann,                               |                                    |
| BigD        | Adversarial Reweighting Guided by Wasserstein                                  | Steffen Staab, and Gjergji                      | Ch                                 |
| 296         | Distance to Achieve Demographic Parity   | Kasneci   | Short                              |
|             |  | Varun Chandrasekaran,                           |                                    |
| D:-D        |  | Suman Banerjee, Diego                           |                                    |
| BigD<br>306 | Hiorarchical Endorated Loarning with Drivacy                                   | Perino, and Nicolas<br>Kourtellis               | Pogular                            |
| 300         | Hierarchical Federated Learning with Privacy                                   |   | Regular                            |
| BigD        | RCDP: A Privacy-Preserving Approach for  | Xiaoying Liu, Juanjuan<br>Zhao, Xitong Gao, and |                                    |
| 525         | Synthesizing Realistic Commuting Data  | Kejiang Ye                                      | Regular                            |
| 323         | Cynthesizing Reductio Commuting Data   | Xiujin Shi, Naiwen Sun,                         | riegaiai                           |
| BigD        | FedGSDW: Enhancing Federated Learning  | Jiawei Gong, and                                |                                    |
| 284         | Robustness against Model Poisoning Attack                                      | Shoujian Yu                                     | Short                              |
|             |  |   | Red: Online video                  |
|             | D2S2: Learning from Complex Data   |   | presentation (not played in room). |
|             |  |   | Access via program                 |
| DicD        | Nuchet: A Scalable Proconditioned Cradient Persont                             | Hyuncook Soung Jaourea                          | link.                              |
| BigD<br>766 | NysAct: A Scalable Preconditioned Gradient Descent using Nystrom Approximation | Hyunseok Seung, Jaewoo<br>Lee, and Hyunsuk Ko   | Short                              |
| 700         | using nystrom Approximation  | Jayalakshmi Mangalagiri,                        | JIIUI L                            |
| BigD        | A Progressive Meta-Algorithm for Large and                                     | Aryya Gangopadhyay, and                         |                                    |
| 768         | Seamless Super Resolution Images   | David Chapman                                   | Short                              |
| 700         | Large Scale Evaluation of Deep Learning-based                                  | Temitope Adeyeha,                               | SHOLL                              |
| BigD        | Explainable Solar Flare Forecasting Models with                                | Chetraj Pandey, and                             |                                    |
| 697         | Attribution-based Proximity Analysis   | Berkay Aydin                                    | Short                              |
| 037         | Impact of Noise in Large Real-World Datasets on                                | Der Ray Ayanii                                  | 511011                             |
| BigD        | Semi-Supervised Object Detection: A Case Study of                              | Bhavyesh Sajja and Seon                         |                                    |
| 775         | Homeless Encampments Detection   | Ho Kim  | Short                              |
| BigD        | Boosting Time Series Prediction of Extreme Events                              | Jimeng Shi, Azam Shirali,                       | Short                              |
| DIRD        | poosting time series reduction of extreme events                               | Juneng Jili, Azallı Jilli dil,                  | JIIUI L                            |

| 671         | by Reweighting and Fine-tuning                                      | and Giri Narasimhan                  |                                     |
|-------------|---|--------------------------------------|-------------------------------------|
|             |   | Minh-Son Dao, Koji                   |                                     |
| BigD        | Spatial-temporal Graph Transformer Network for                      | Zettsu, and Duy-Tang                 |                                     |
| 777         | Spatial-temporal Forecasting  | Hoang                                | Short                               |
|             |   | Sarah Alnegheimish,                  |                                     |
| BigD        |   | Laure Berti-Équille, and             |                                     |
| 788         | Benchmarking in the Service of the End-User                         | Kalyan Veeramachaneni                | Short                               |
|             |   | Benjamin Cobb, Ricardo               |                                     |
| BigD        | Clustering and Topic Discovery of Multiway Data via                 | Velasquez, Richard                   |                                     |
| 813         | Joint-NCMTF   | Vuduc, and Haesun Park               | Short                               |
|             |   | Pouya Hosseinzadeh,                  |                                     |
|             |   | Soukaina Filali                      |                                     |
| BigD        | ACTS: Adaptive Counterfactual Explanations for                      | Boubrahimi, and Shah                 |                                     |
| 826         | Time Series Data Using Barycenters [Vision Paper]                   | Muhammad Hamdi                       | Short                               |
|             | D1S2: Big Data Learning and   |                                      | Red: Online video presentation (not |
|             | Analytics I   |                                      | played in room).                    |
|             | Allalytics  |                                      | Access via program link.            |
|             | Unraveling Intricacies: A Decomposition Approach                    | Wenbin Hua, Yufan Wang,              |                                     |
| BigD        | for Few-Shot Multi-Intent Spoken Language                           | Rui Fan, Xinhui Tu, and              |                                     |
| 228         | Understanding   | Tingting He                          | Regular                             |
| BigD        | Context-Aware Diffusion-based Sequential                            |                                      |                                     |
| 859         | Recommendation  | Di You and Kyumin Lee                | Regular                             |
| BigD        |   | Eric Bax, Arundhyoti                 |                                     |
| 247         | Early Stopping Based on Repeated Significance                       | Sarkar, and Alex Shtoff              | Regular                             |
|             |   | Hongjie Chen, Aaron                  |                                     |
|             |   | Beachnau, Panos                      |                                     |
|             |   | Thomas, Pranav                       |                                     |
| BigD        | LIVE-ITS: LSH-based Interactive Visualization                       | Maneriker, Josh Kimball,             |                                     |
| 279         | Explorer for Large-Scale Incomplete Time Series                     | and Ryan Rossi                       | Regular                             |
|             |   | Mahtab Movahhedrad,                  |                                     |
| BigD        | A Green Learning Approach to Efficient Image                        | Zijing Chen, and CC. Jay             |                                     |
| 355         | Demosaicking  | Kuo                                  | Regular                             |
|             |   | Zefan Zeng, Qing Cheng,              |                                     |
| D: D        | Aligning the Representation of Knowledge Graph                      | Xingchen Hu, Zhong Liu,              |                                     |
| BigD        | and Large Language Model for Causal Question                        | Jingke Shen, and Yahao               | D I                                 |
| 253         | Answering   | Zhang                                | Regular                             |
| DicD        | Visual Lifeles Petrioval through                                    | Yu-Fei Shih, An-Zi Yen,              |                                     |
| BigD<br>465 | Visual Lifelog Retrieval through Captioning-Enhanced Interpretation | Hen-Hsen Huang, and<br>Hsin-Hsi Chen | Short                               |
| 403         | · · · · · · · · · · · · · · · · · · ·                               | HISHI-HSI CHEH                       | Red: Online video                   |
|             | D1S8: Big Data Learning and   |                                      | presentation (not                   |
|             | Analytics II  |                                      | played in room). Access via program |
|             | 7555  |                                      | link.                               |
|             |   | Shaan Pakala, Bryce Graw,            |                                     |
|             |   | Dawon Ahn, Tam Dinh,                 |                                     |
| BigD        | Automating Data Science Pipelines with Tensor                       | Mehnaz Tabassum                      |                                     |
| 369         | Completion  | Mahin, Vassilis Tsotras, Jia         | Regular                             |

|             |   | Chen, and Evangelos E.<br>Papalexakis   |   |
|-------------|---|---|---|
| BigD<br>415 | MAcPNN: Mutual Assisted Learning on Data Streams with Temporal Dependence   | Federico Giannini and<br>Emanuele Della Valle   | Regular   |
| BigD<br>438 | Improving CLIP for Biomedical Retrieval: A Multi-Margin Contrastive Loss Approach   | Ejan Shakya, Haritha<br>Prasad Rayakota, and<br>Pei-Chi Huang   | Regular   |
| BigD<br>288 | Unsupervised Machine Learning for Detecting and Locating Human-Made Objects in 3D Point Cloud   | Hong Zhao, Huyunting<br>Huang, Tonglin Zhang,<br>Baijian Yang, Jin<br>Wei-Kocsis, and Songlin<br>Fei  | Short   |
| BigD<br>798 | Near Real-Time Wildfire Damage Assessment using<br>Aerial Thermal Imagery and Machine Learning  | Saqib Azim, Mai Nguyen,<br>Daniel Crawl, Jessica<br>Block, Rawaf Al Rawaf,<br>Francesca Hart, Mark<br>Campbell, Robert Scott,<br>and Ilkay Altintas | Short   |
| BigD<br>385 | Leveraging Spatio-Temporal Locality in Linear Model<br>Trees for Multi-Step Time Series Forecasting   | Annunziata D'Aversa,<br>Gianvito Pio, and<br>Michelangelo Ceci  | Short   |
| BigD<br>434 | A Comprehensive Forecasting Framework based on<br>Multi-Stage Hierarchical Forecasting Reconciliation<br>and Adjustment                         | Zhengchao Yang, Mithun<br>Ghosh, Anish Saha, Dong<br>Xu, Konstantin Shmakov,<br>and Kuang-chih Lee  | Regular   |
| BigD<br>387 | Fast Second-order Method for Neural Networks under Small Treewidth Setting  | Xiaoyu Li, Jiangxuan Long,<br>Zhao Song, and Tianyu<br>Zhou   | Regular   |
|             | D1S9: Big Data Learning and Analytics III   |   | Red: Online video<br>presentation (not<br>played in room).<br>Access via program<br>link. |
| BigD<br>448 | Accurate Coupled Tensor Factorization with Knowledge Graph  | SeungJoo Lee, Yong-chan<br>Park, and U Kang   | Regular   |
| BigD<br>476 | A Domain-Agnostic Neurosymbolic Approach for Big<br>Social Data Analysis: Evaluating Mental Health<br>Sentiment on Social Media during COVID-19 | Vedant Khandelwal,<br>Manas Gaur, Ugur<br>Kursuncu, Valerie Shalin,<br>and Amit Sheth   | Regular   |
| BigD<br>540 | Attention Based Machine Learning Methods for Data Reduction with Guaranteed Error Bounds  | Sanjay Ranka  | Regular   |
| BigD<br>365 | Periscope: A Framework for Visualizations of<br>Multiresolution Spatiotemporal Data at Scale  | Everett Lewark, Matthew<br>Young, Paahuni<br>Khandelwal, Sangmi<br>Pallickara, and Shrideep<br>Pallickara   | Short   |
| BigD        | LLM4cast: Repurposed LLM for Viral Disease  | Farah Saeed, Mohammed   | Short   |

| 366         | Forecasting   | Aldosari, Budak Arpinar,<br>and John A. Miller   |         |
|-------------|---|--|---------|
| BigD<br>431 | FisherMask: Enhancing Neural Network Labeling Efficiency in Image Classification Using Fisher Information           | Shreen Gul, Mohamed<br>Elmahallawy, Sanjay<br>Madria, and Ardhendu<br>Tripathy   | Short   |
| BigD<br>404 | COCALITE: A Hybrid Model COmbining CAtch22 and LITE for Time Series Classification                                  | Oumaima Badi, Maxime<br>Devanne, Ali<br>Ismail-Fawaz, Javidan<br>Abdullayev, Vincent<br>Lemaire, Stefano Berretti,<br>Jonathan Weber, and<br>Germain Forestier | Short   |
| 707         | Perturbation-driven data augmentation for time  | Germani i orestiei   | Short   |
| BigD<br>441 | series anomaly detection improvement in predictive maintenance  | Hyeyoung Lee, Sangkyun<br>Lee, and Sungjoon Choi   | Short   |
| BigD<br>555 | VideoBadminton: A Video Dataset for Badminton<br>Action Recognition   | Qi Li, Tzu-Chen Chiu,<br>Hsiang-Wei Huang,<br>Min-Te Sun, and<br>Wei-Shinn Ku  | Short   |
| BigD<br>482 | Negative Sample Enhancement Strategy to Improve<br>Contrastive Learning for Unsupervised Sentence<br>Representation | Hao Li and Chunzhi Xie   | Short   |
| BigD<br>549 | Optimizing Liquid Neural Networks: A comparative study of LTCs and CFCs   | Pranav Deepak Tanna,<br>Siddharth Khare, Sanyam<br>Sanjay Jain, Shivodit Raj<br>Vishnoi, Samay Roy, and<br>Jagat Sesh Challa                                   | Short   |
| BigD        | Staay 5. 2. 55 a.i.a 6. 55  | Helia Hedayati and Saeed   | Siloit  |
| 413         | DataInsight: Big Data Analytics Services  | Samet  | Short   |
| BigD<br>496 | Federated Learning under Sample Selection<br>Heterogeneity  | Huy Mai and Xintao Wu  | Short   |
| BigD<br>548 | Ternary Logit Distillation via Non-Target Classes Decomposition   | Ninghua Dong, Zhen Liu,<br>Xiang He, and Yiran Li  | Short   |
| BigD<br>402 | SkipSNN: Efficiently Classifying Spike Trains with Event-attention  | Hang Yin, Yao Su, Liping<br>Liu, Thomas Hartvigsen,<br>Xin Dai, and Xiangnan<br>Kong   | Short   |
| BigD        | Deep Learning Service for Efficient Data Distribution   | Xiaoke Zhu, Qi Zhang, Wei  |         |
| 311         | Aware Sorting   | Zhou, and Ling Liu   | Short   |
| BigD<br>393 | CATS: Contrastive learning for Anomaly detection in Time Series   | Joël Roman Ky, Bertrand<br>Mathieu, Abdelkader<br>Lahmadi, and Raouf<br>Boutaba  | Short   |
| BigD<br>541 | Incomplete Multi-kernel k-means Clustering With Fractional-order Embedding  | Deheng Xu, Yun Li,<br>Yun-Hao Yuan, Jipeng<br>Qiang, and Yi Zhu  | Regular |

|             | D2S6: Big Data Analytics IV   |   | Red: Online video<br>presentation (not<br>played in room).<br>Access via program<br>link. |
|-------------|---|---|---|
| BigD        | A Semi-Supervised Model for Non-Cellular Elements   | Zihao Xu, Peter<br>Nordström, Sina<br>Sheikholeslami, Ahmad<br>Al-Shishtawy, and                                      |   |
| 557         | Segmentation in Microscopy Images of Wood   | Vladimir Vlassov  | Short   |
| BigD        | Risk Diversification Strategy with Moving Average   | Yuki Hayashi and  |   |
| 870         | Reversion for Automatic Portfolio Optimization  | Atsuyoshi Nakamura  | Regular   |
| BigD<br>537 | GAN Stabilization Under Practical Training Assumptions  | Joshua DeOliveira, Walter<br>Gerych, and Elke<br>Rundensteiner  | Regular   |
| BigD<br>578 | Edge Grading in Trading Cards Using Transfer<br>Learning: Methods, Experiments, and Evaluation  | Lutfun Nahar, Md. Saiful<br>Islam, Mohammad<br>Awrangjeb, and Rob<br>Verhoeve   | Short   |
| BigD<br>596 | Global-local Fourier Neural Operator for<br>Accelerating Coronal Magnetic Field Model           | Yutao Du, Qin Li, Raghav<br>Gnanasambandam,<br>Mengnan Du, Haimin<br>Wang, and Bo Shen                                | Short   |
| BigD<br>731 | Semi-Supervised Multi-Source Sea Ice Classification in Small-Data Regime                        | Samira Alkaee Taleghan,<br>Morteza Karimzadeh,<br>Andrew P.Barrett, Walter<br>N.Meier, and Farnoush<br>Banaei-Kashani | Short   |
| BigD<br>510 | Educational Digital Twin: Tackling Complexity in Educational Big Data                           | Luwen Huang and Karen<br>Willcox  | Short   |
| _           | MIBR: Bridging Domains through Diverse Interests  | Chengzhe Zhang, Xu Min,<br>Changsheng Li, Xiaolu<br>Zhang, Weichang Wu, Jun<br>Zhou, Ye Yuan, and                     |   |
| 456         | for Cross-Domain Sequential Recommendation  | Guoren Wang   | Regular   |
| BigD<br>572 | Meta-Learning for Debiasing Recommendation using<br>Simulated Uniform Data                      | and yafan yuan  | Short   |
| BigD<br>650 | Divide2Conquer (D2C): A Decentralized Approach Towards Overfitting Remediation in Deep Learning | Md. Saiful Bari Siddiqui,<br>Md Mohaiminul Islam,<br>and Md. Golam Rabiul<br>Alam                                     | Short   |
| BigD<br>584 | Alternative Methods to SHAP Derived from Properties of Kernels: A Note on Theoretical Analysis  | Kazuhiro Hiraki, Shinichi<br>Ishihara, and Junnosuke<br>Shino   | Short   |
| BigD<br>556 | Improving Multi-Domain Task-Oriented Dialogue System with Offline Reinforcement Learning        | Dharmendra Prajapat and<br>Durga Toshniwal  | Short   |
| BigD        | A Data-Driven Approach for Automated Multi-Site   | Ming Hui Tan, Kar Way   | Short   |

| 616         | Competitive Facility Location  | Tan, and Hoong Chuin Lau                       |                                     |
|-------------|--|--|-------------------------------------|
| 010         | Commercial Space Classification and Prediction with  | tany and ricong chain zad                      |                                     |
| BigD        | Machine Learning and Multiple Data Sources: A  |  |                                     |
| 713         | Case Study of Milan  | Jiabin Wei                                     | Short                               |
|             | DANCE: Deep Learning-Assisted Analysis of ProteiN  | Taslim Murad, Prakash                          | <u> </u>                            |
| BigD        | Sequences Using Chaos Enhanced Kaleidoscopic   | Chourasia, Sarwan Ali,                         |                                     |
| 724         | Images   | and Murray Patterson                           | Short                               |
| 7           |  | and manay raccerson                            | Red: Online video                   |
|             | D1S10: Deep Learning I   |  | presentation (not played in room).  |
|             |  |  | Access via program                  |
|             | [Vision Paper] Quality-Aware Experience  |  | link.                               |
| BigD        | Exploitation in Model-Based Reinforcement  | Guang Yang, Jiahe Li, Ziye                     |                                     |
| 558         | Learning   | Geng, and Changqing Luo                        | Regular                             |
| 330         | Learning   | Guang Yang, Ziye Geng,                         | Negulai                             |
|             |  | Jiahe Li, Yanxiao Zhao,                        |                                     |
| BigD        | A Feedback-based Decision-Making Mechanism for   | Sherif Abdelwahed, and                         |                                     |
| 559         | _  | ·  | Pogular                             |
| 223         | Actor-Critic Deep Reinforcement Learning   | Changqing Luo Alexandra Zytek, Sara            | Regular                             |
|             |  | Pido, Sarah Alnegheimish,                      |                                     |
| DiaD        | Evolingo: Evolaining Al Brodictions using Large  | Laure Berti-Equille, and                       |                                     |
| BigD<br>580 | Explingo: Explaining Al Predictions using Large  |  | Dogular                             |
|             | Language Models  | Kalyan Veeramachaneni                          | Regular                             |
| BigD<br>588 | Data-driven Synchronization Protocols for<br>Data-parallel Neural Learning over Streaming Data   | George Klioumis and<br>Nikos Giatrakos         | Regular                             |
| 300         | Data-parallel Neural Learning Over Streaming Data  | MohammadReza                                   | Regulai                             |
|             |  | EskandariNasab, Shah                           |                                     |
|             |  | Muhammad Hamdi, and                            |                                     |
| BigD        | SeriesGAN: Time Series Generation via Adversarial  | Soukaina Filali                                |                                     |
| 601         | and Autoregressive Learning  | Boubrahimi                                     | Regular                             |
| 001         |  | Doublammi                                      | Red: Online video                   |
|             | D1S11: Machine Learning  |  | presentation (not                   |
|             | Algorithms I   |  | played in room). Access via program |
|             | <u> </u>   |  | link.                               |
|             |  | Cheolmin Kim, Youngseok                        |                                     |
|             |  | Kim, Yegna Subramanian                         |                                     |
| BigD        | Stochastic Scale Invariant Power Iteration for   | Jambunath, and Diego                           |                                     |
| 623         | KL-divergence Nonnegative Matrix Factorization   | Klabjan  | Regular                             |
|             |  | Junhong Lin, Xiaojie Guo,                      |                                     |
|             |  | Shuaicheng Zhang, Dawei                        |                                     |
| BigD        | UnifiedGT: Towards a Universal Framework of  | Zhou, Yada Zhu, and                            |                                     |
| 633         | Transformers in Large-Scale Graph Learning   | Julian Shun                                    | Regular                             |
|             | ORIS: Online Active Learning Using Reinforcement   |  |                                     |
| <b>.</b>    | ,  | 0 1 10 1 -: :-:                                |                                     |
| BigD        | Learning-based Inclusive Sampling for Robust   | Rahul Pandey, Ziwei Zhu,                       |                                     |
| BigD<br>648 | Learning-based Inclusive Sampling for Robust<br>Streaming Analytics System   | Rahul Pandey, Ziwei Zhu,<br>and Hemant Purohit | Regular                             |
| 648         | Learning-based Inclusive Sampling for Robust Streaming Analytics System Enhancing Big Data Analysis: A Recursive Window  | and Hemant Purohit                             | Regular                             |
| 648<br>BigD | Learning-based Inclusive Sampling for Robust<br>Streaming Analytics System<br>Enhancing Big Data Analysis: A Recursive Window<br>Segmentation Strategy for Multivariate Longitudinal | and Hemant Purohit  Desmond Fomo and           |                                     |
| 648         | Learning-based Inclusive Sampling for Robust Streaming Analytics System Enhancing Big Data Analysis: A Recursive Window  | and Hemant Purohit                             | Regular<br>Regular                  |

| 604         | Time Series   | Ahmadzadeh, and Krishna<br>Rukmini Puthucode  |  |
|-------------|---|---|--|
| BigD<br>641 | OSR-ViT: A Simple and Modular Framework for Open-Set Object Detection and Discovery       | Matthew Inkawhich,<br>Nathan Inkawhich, Hao<br>Yang, Jingyang Zhang,<br>Randolph Linderman, and<br>Yiran Chen                                     | Regular  |
| 041         |   | Than chen   | Red: Online video  |
|             | D1S12: Deep learning II   | Runner-up for Best<br>Paper Award   | presentation (not<br>played in room).<br>Access via program<br>link. |
|             |   |   | Regular  |
|             |   | Ryan Benkert, Mohit   | Runner-up for  |
| BigD        | Targeting Negative Flips in Active Learning using   | Prabhushankar, and  | Best Paper   |
| 668         | Validation Sets   | Ghassan AlRegib   | Award  |
|             |   | Jingwei Sun, Zhixu Du,  |  |
|             |   | Anna Dai, Saleh   |  |
| D: D        | DL AVEL Data at a selection of the New York Selection of the                              | Baghersalimi, Alireza   |  |
| BigD        | · ·   | Amirshahi, David Atienza,   | Danislan   |
| 684         | Learning against Unexpected Quitting of Parties   | and Yiran Chen  | Regular  |
| BigD        | Effective Guidance for Model Attention with Simple  | Seongmin Lee, Ali Payani,   | Dogulos  |
| 719         | Yes-no Annotations  | and Duen Horng Chau   | Regular  |
| BigD<br>720 | SPrint: Self-Paced Continual Learning with Adaptive                                       | Min-Seon Kim, Ling Liu, and Hyuk-Yoon Kwon  | Regular  |
| 720         | Curriculum and Memory Replay  | Shreen Gul, Mohamed   | negulai  |
| BigD        | LPLgrad: Optimizing Active Learning Through Gradient Norm Sample Selection and Auxiliary  | Elmahallawy, Sanjay<br>Madria, and Ardhendu   |  |
| 725         | Model Training  | Tripathy  | Regular Red: Online video  |
|             | D2S9: Machine Learning Algorithms II  | Best Student Paper Award  | presentation (not played in room). Access via program link.          |
| BigD<br>753 | Predicting Surface Water Bacteria Levels Using<br>Transfer Learning and Domain Adaptation | Ali Elahi, David Shumway,<br>Megan Kowalcyk,<br>Abhilasha Shrestha, Nikita<br>Gautam, Doina Caragea,<br>Cornelia Caragea, and<br>Samuel Dorevitch | Regular  |
|             | Efficient Hierarchical Contrastive Self-supervising                                       |   |  |
| BigD        | Learning for Time Series Classification via   | Kevin Garcia, Juan Perez,   |  |
| 791         | Importance-aware Resolution Selection   | and Yifeng Gao  | Regular  |
|             | ·   | H M Mohaimanul Islam,   |  |
| BigD        | SplitVAEs: Decentralized scenario generation from   | Huynh Quang Nguyen Vo,  |  |
| 796         | siloed data for stochastic optimization problems  | and Paritosh Ramanan  | Regular  |
| BigD        | OL4TeX: Adaptive Online Learning for Text   | Min-Seon Kim, Ling Liu,   |  |
| 319         | Classification under Distribution Shifts  | and Hyuk-Yoon Kwon  | Short  |
| BigD        | Fine-grained Graph-based Anomaly Detection on   | Isaiah J. King, Benjamin  |  |
| 250         | Vehicle Controller Area Networks  | Bowman, and H. Howie  | Short  |

|      |   | Ниэра                      |                           |
|------|---|----------------------------|---------------------------|
|      |   | Huang                      |                           |
|      |   | Loredana Caruccio,         |                           |
| DiaD | DVAN: A tool for evaluining and visually analyzing  | Stefano Cirillo, Gianpaolo |                           |
| BigD | RYAN: A tool for explaining and visually analyzing  | Iuliano, Giuseppe Polese,  | Chaut                     |
| 628  | the evolution of Relaxed Functional Dependencies    | and Roberto Stanzione      | Short                     |
|      |   | Qi Le, Enmao Diao, Xinran  | Danilan <b>V</b> Dant     |
| D: D | Description of the section of the property          | Wang, Ahmad Faraz          | Regular 6 Best            |
| BigD | DynamicFL: Federated Learning with Dynamic          | Khan, Vahid Tarokh, Jie    | Student Paper             |
| 733  | Communication Resource Allocation                   | Ding, and Ali Anwar        | Award                     |
|      | A Hybrid Model Based on Graph Convolutional         | Dongsheng Li, Kun Niu,     |                           |
| BigD | Network and Multi-head Transformer for Joint        | Xiao Chen, and Zhihai      |                           |
| 764  | Multiple Intent Detection and Slot Filling          | Wang                       | Regular Red: Online video |
|      | D3S2: Machine Learning                              | Runner-up for Best         | presentation (not         |
|      | Algorithms III                                      | Student PAper Award        | played in room).          |
|      | Aigoritimis iii                                     |                            | Access via program link.  |
| BigD | Pre-Trained Language Models with Topic Attention    |                            |                           |
| 801  | for Supervised Document Structure Learning          | Dang Pham and Tuan Le      | Regular                   |
| BigD | MADOD: Generalizing OOD Detection to Unseen         | Haoliang Wang, Chen        |                           |
| 858  | Domains via G-Invariance Meta-Learning              | Zhao, and Feng Chen        | Regular                   |
|      |   | Sulabh Shrestha,           |                           |
| BigD | Real-Time Video Analysis for Accurate Biometric     | Emanuela Marasco, and      |                           |
| 832  | Identity Verification in Mobile Devices             | Babek Norouzlou            | Regular                   |
|      |   |                            | Regular                   |
|      |   | Giacomo Ziffer, Federico   | Runner-up for             |
| BigD | Tenet: Benchmarking Data Stream Classifiers in      | Giannini, and Emanuele     | Best Student              |
| 840  | Presence of Temporal Dependence                     | Della Valle                | PAper Award               |
|      |   | Kai Jiang, Chen Zhao,      |                           |
| BigD | FEED: Fairness-Enhanced Meta-Learning for Domain    | Haoliang Wang, and Feng    |                           |
| 856  | Generalization                                      | Chen                       | Regular                   |
|      | 2FWL-SIRGN: A Scalable Structural 2-dimensional     |                            | _                         |
| BigD | Folklore Weisfeiler Lehman Graph Representation     | Justin Carpenter and       |                           |
| 817  | Learning Approach Via Structural Graph Partitioning | Edoardo Serra              | Regular                   |
| BigD | Personalized Federated Learning by Domain-Aware     | Yuto Suzuki and Farnoush   |                           |
| 251  | Network Pruning and Re-growth                       | Banaei-Kashani             | Short                     |
|      |   | Weiqing He, Bojian Hou,    |                           |
|      |   | Tianqi Shang, Davoud       |                           |
| BigD | SEFD: Semantic-Enhanced Framework for Detecting     | Ataee Tarzanagh, Qi Long,  |                           |
| 763  | LLM-Generated Text                                  | and Li Shen                | Short                     |
|      | Data Reliability Enhanced Prediction for            | Prianka Banik, Lin Li,     |                           |
| BigD | Recommendation System: A Case Study on Named        | Xishuang Dong, and Lijun   |                           |
| 689  | Entity Recognition                                  | Qian                       | Short                     |
|      |   | David Millard, Arielle     |                           |
| BigD | Deep Learning for Koopman Operator Estimation in    | Carr, and Stephane         |                           |
| 702  | Idealized Atmospheric Dynamics                      | Gaudreault                 | Short                     |
| BigD | Efficient SGD Neural Network Training via Sublinear | Lianke Qin, Zhao Song,     |                           |
| _    | Activated Neuron Identification                     | and Yuanyuan Yang          | Short                     |
| 706  | Activated Neuron Identification                     | and radify dan fails       | SHOLL                     |

|             |   | Sara Nassar, Samir   |   |
|-------------|---|--|---|
|             |   | Belhaouari, Mebarka  |   |
| BigD        | Initialization Method for t-Distributed Stochastic  | Allaoui, and Mohammed  |   |
| 219         | Neighbour Embedding (t-SNE)   | Kherfi   | Short   |
|             | D1S13: Big Data Applications I  |  | Red: Online video<br>presentation (not<br>played in room).<br>Access via program<br>link. |
| BigD        | Predicting ChatGPTs Ability to Solve Complex  | Nguyen Ho, James May,<br>Bao Ngo, Jack Formato,<br>Linh Ngo, Van Long Ho,  |   |
| 227         | Programming Challenges  | and Hoang Bui  | Regular   |
| D' - D      | A.C. (C.)   | Hsu-Chao Lai, Po-Hsiang<br>Fang, Yi-Ting Wu, Lo  |   |
| BigD<br>323 | A Confidence-Based Power-Efficient Framework for<br>Sleep Stage Classification on Consumer Wearables          | Pang-Yun Ting, and<br>Kun-Ta Chuang  | Regular   |
| BigD        | Evaluate the Policy Impact of Temporary Suspension of Social Media Account using Synthetic Control            |  |   |
| 352         | Method  | King wa Fu   | Regular   |
| D:~D        | Constant VOE Viewel Question Fundamention for Course  | Jialu Li, Manish Thota,  |   |
| BigD<br>331 | SparrowVQE: Visual Question Explanation for Course Content Understanding                                      | Holik, and Youshan Zhang   | Regular   |
| BigD<br>340 | Is it Fine to Tune? Evaluating SentenceBERT Fine-tuning for Brazilian Portuguese Text Stream Classification   | Bruno Yuiti Leão Imai,<br>Cristiano Mesquita<br>Garcia, Marcio Vinicius<br>Rocha, Alessandro<br>Lameiras Koerich, Alceu<br>de Souza Britto Jr., and<br>Jean Paul Barddal | Regular   |
|             |   | Shoutai Zhu, Ziqiang<br>Yuan, Kaiyuan Wang,  |   |
| BigD<br>334 | Enhancing Financial Reasoning in Large Language Models: The Role of Gold Facts                                | Yishu Zhang, and Wenqi<br>Wei  | Regular   |
|             | D1S14: Big Data Applications II   |  | Red: Online video<br>presentation (not<br>played in room).<br>Access via program<br>link. |
|             |   | Hanwen Liu, Daniel<br>Hajialigol, Benny Antony,  |   |
| BigD<br>348 | EEG2TEXT: Open Vocabulary EEG-to-Text Translation with Multi-View Transformer                                 | Aiguo Han, and Xuan<br>Wang  | Regular   |
| BigD<br>354 | Dynamic User Grouping and Evolution Tracking (DUGET): Leveraging Machine Learning for Public Transit Insights | Tobias Johannesson, Isak<br>Rubensson, Sina<br>Sheikholeslami, Ahmad<br>Al-Shishtawy, and<br>Vladimir Vlassov  | Regular   |
| BigD        | [Vision Paper] PRObot: Enhancing Patient-Reported   | Maren Pielka, Tobias   | педини  |
| 408         | Outcome Measures for Diabetic Retinopathy using   | Schneider, Jan Terheyden,  | Regular   |

|             | Chatbots and Generative Al  | and Rafet Sifa  |  |
|-------------|---|---|--|
|             |   | Bo Shen, Marco Marena,                                  |  |
| BigD        | Deep Computer Vision for Solar Physics Big Data:  | Chenyang Li, Qin Li, Haodi<br>Jiang, Mengnan Du, Jiajun |  |
| 468         | Opportunities and Challenges [Vision Paper]   | Xu, and Haimin Wang                                     | Regular                                |
|             | j i j   | Kazi Ashik Islam, Da Qi                                 |  |
|             |   | Chen, Madhav Marathe,                                   |  |
|             |   | Henning Mortveit,                                       |  |
| BigD<br>606 | A Scalable Game-theoretic Approach to Urban<br>Evacuation Routing and Scheduling                  | Samarth Swarup, and Anil Vullikanti                     | Regular                                |
| 000         | Evacuation routing and Scheduling   | JinGee Kim, Yong-chan                                   | neguiai                                |
| BigD        | Accurate Stock Movement Prediction via Multi-Scale  | Park, Jaemin Hong, and U                                |  |
| 450         | and Multi-Domain Modeling   | Kang  | Regular                                |
|             | Melanoma Classification using GAN based   | Akanksha Lal, Sadhana                                   |  |
| BigD        | augmentation and Self-Supervised feature  | Tiwari, Rushil Patra, and                               |  |
| 626         | extraction  | Sonali Agrawal  Qiwen Zheng, Shun Mao,                  | Short                                  |
| BigD        | EGANKT: Enhancing Graph-Attention Networks for<br>Knowledge Tracing by Predicting Concepts and    | Kai Chen, and Yuncheng                                  |  |
| 615         | Abilities   | Jiang   | Regular                                |
|             |   | Yunlong Fan, Baixuan Li,                                |  |
| BigD        | Constructing A Human-Centered Dataset for Second  | Zhiheng Yang, and                                       |  |
| 388         | Language Acquisition via Large Language Models  | Zhiqiang Gao  | Regular                                |
|             |   | Tunhou Zhang, Wei Wen,                                  |  |
|             |   | Igor Fedorov, Xi Liu,<br>Buyun Zhang, Fangqiu           |  |
|             |   | Han, Wen-Yen Chen,                                      |  |
| BigD        | DistDNAS: Search Efficient Feature Interactions   | Yiping Han, Feng Yan, Hai                               |  |
| 639         | within 2 Hours  | Li, and Yiran Chen                                      | Short                                  |
|             | D1S15: Big Data Analytics I   |   | Red: Online video presentation (not    |
|             |   | Honorable Mention                                       | played in room).<br>Access via program |
|             |   | for Best Paper Award                                    | link.                                  |
|             |   | Jeovane Honorio Alves,                                  |  |
|             |   | Radu State, Cinthia<br>Obladen de Almendra              |  |
| BigD        |   | Freitas, and Jean Paul                                  |  |
| 659         | LongKey: Keyphrase Extraction for Long Documents  | Barddal   | Regular                                |
|             |   | Chengjie Zheng,   | -                                      |
|             |   | Tewodros Mulugeta                                       |  |
|             | Animal IEDA: Advancing Animal Dahaviar Chudi  | Dagnew, Liuyue Yang, Wei                                |  |
| BigD        | Animal-JEPA: Advancing Animal Behavior Studies Through Joint Embedding Predictive Architecture in | Ding, Shiqian Shen,<br>Changning Wang, and              |  |
| 698         | Video Analysis  | Ping Chen   | Regular                                |
|             | •   | Dian Chen, Paul Yang,                                   | Ü                                      |
| BigD        | susFL: Federated Learning-based Monitoring for  | Dong Sam Ha, and  |  |
| 597         | Sustainable, Attack-Resistant Smart Farms   | Jin-Hee Cho   | Regular                                |

|      |  | I                           |  |
|------|--|-----------------------------|--|
|      |  | Tianle Wang, Jorge          |  |
|      |  | Ramirez, Cristina           | Regular                                |
|      | An Active Learning-Based Streaming Pipeline for      | Garcia-Cardona, Thomas      | Honorable                              |
| BigD | Reduced Data Training of Structure Finding Models    | Proffen, Shantenu Jha,      | Mention for Best                       |
| 749  | in Neutron Diffractometry                            | and Sudip Seal              | Paper Award                            |
|      |  | Trilok Padhi, Ugur          |  |
|      |  | Kursuncu, Yaman Kumar,      |  |
| BigD | Enhancing Cross-Modal Contextual Congruence for      | Valerie L. Shalin, and Lane |  |
| 769  | Crowdfunding Success using Knowledge Graphs          | Peterson Fronczek           | Regular                                |
| BigD | <u> </u>   |                             |  |
| 696  | SE(3) Equivariant Neural Network for 3D Graphs       | Sarp Aykent and Tian Xia    | Regular                                |
|      |  |                             | Red: Online video                      |
|      | D1S16: Big Data Analytics II                         |                             | presentation (not                      |
|      |  |                             | played in room).<br>Access via program |
|      |  |                             | link.                                  |
| BigD | Efficient Arrhythmia Detection Using Progressive     | Tavonput Luangphasy and     |  |
| 799  | Resolution Shrinking                                 | Xinghui Zhao                | Regular                                |
|      |  | Lei Gong, Aidong Zhang,     |  |
| BigD | Context-Specific Feature Augmentation for            | Andrey Shor, and Kishlay    |  |
| 838  | Improving Social Determinants of Health Extraction   | Jha                         | Regular                                |
|      | PerSSD: Persistent, Shared, and Scalable Data with   | Paula Olaya, Sophia Wen,    |  |
| BigD | Node-Local Storage for Scientific Workflows in Cloud | Jay Lofstead, and Michela   |  |
| 687  | Infrastructure                                       | Taufer                      | Regular                                |
|      |  | Palak Sood, Chengyang       |  |
| BigD | Understanding Student Sentiment on Mental Health     | He, Divyanshu Gupta, Yue    |  |
| 846  | Support in Colleges Using Large Language Models      | Ning, and Ping Wang         | Regular                                |
| BigD | Support in Coneges Oshig Edige Edilgadge Models      | Tring, and ring wang        | ricgulai                               |
| 834  | SO(3) Equivariant Framework for Spatial Networks     | Tian Xia and Sarp Aykent    | Regular                                |
| 034  |  | Tian Ala and Sarp Aykent    | Red: Online video                      |
|      | D1S17: Big Data Analytics III                        |                             | presentation (not                      |
|      |  |                             | played in room). Access via program    |
|      |  |                             | link.                                  |
|      |  | Charalampos Chelmis,        |  |
|      |  | Mahsa Azarshab,             |  |
| BigD | Reject Inference as a Noisy Label Detection and      | Khandker Sadia Rahman,      |  |
| 406  | Counterfactual Correction Task                       | and Mehrdad Mirpourian      | Short                                  |
|      |  | Beatrice Insalata, Fabian   |  |
| BigD | Multimodal survival prediction using                 | Schmidt, and Vladimir       |  |
| 407  | TabTransformer and BioClinicalBERT on MIMIC-III      | Vlassov                     | Short                                  |
|      |  | Raghu Chandra Katikeri,     |  |
|      |  | Sai Phaniraja Maddila, Sai  |  |
|      | T2I-RISE - A Comprehensive Approach with             | Pratheek, Rajvi Desai       |  |
|      | Conversational Context and Feedback Systems for      | Birenbhai, Amit Vaid,       |  |
| BigD | Text-to-Insights with Reinforcement learning,        | Neelesh Shukla, and         |  |
| 477  | Integration of Semantic layers and Enrichment        | Sandeep Jain                | Short                                  |
| BigD | mice and of semantic tayers and Emiliantic           | Ye Xue, Diego Klabjan,      | 5.1010                                 |
| 829  | Multimodal Learning on Temporal Data                 | and Jean Utke               | Short                                  |
| 023  | Miditimodal Learning on Temporal Data                | and Jean Otke               | JIIUIL                                 |

| BigD | Estimate Causal Effects of Entangled Treatment on   | JINGYUAN CHOU,<br>JIANGZHUO CHEN, and                  |       |
|------|---|--|-------|
| 755  | Graphs using Disentangled Instrumental Variables    | MADHAV MARATHE   | Short |
|      |   | Srinivas Eswar, Koby                                   |       |
|      |   | Hayashi, Benjamin Cobb,                                |       |
|      |   | Ramakrishnan Kannan,                                   |       |
| BigD | On Rank Selection for Nonnegative Matrix            | Grey Ballard, Richard                                  |       |
| 760  | Factorization                                       | Vuduc, and Haesun Park                                 | Short |
|      |   | Raghu Chandra Katikeri,                                |       |
|      |   | Alok Nook Raj  |       |
|      |   | Pepakayala, Lokesh                                     |       |
|      | EVOLVE E al attaca (Lacara de COLVALITA de L        | Kuncham, Rachita Barla,                                |       |
| D:-D | EVOLVE: Evaluation of Language-to-SQL Validity and  | Tarun Kasula, Sai Charan                               |       |
| BigD | Effectiveness - A Detailed Review Framework for     | Ravulapally, and Amit                                  | Cht   |
| 479  | Complex Text-to-SQL Queries                         | Vaid   | Short |
|      |   | Austin Yunker, Jason Luce,<br>John C. Roeske, Rajkumar |       |
|      |   | Kettimuthu, Hyejoo Kang,                               |       |
| BigD | Noise2Inverse for 3D Low-Dose Cone-Beam             | Sebastien Gros, and Alec                               |       |
| 503  | Computed Tomography                                 | M. Block   | Short |
| 303  | Prioritizing Potential Wetland Areas via            | Yoonhyuk Choi, Reepal                                  | SHOLL |
| BigD | Region-to-Region Knowledge Transfer through         | Shah, John Sabo, Huan                                  |       |
| 223  | Domain Disentanglement and Adaptive Propagation     | Liu, and Selçuk Candan                                 | Short |
|      | Domain Disentangiement and Magaire Hopagation       | Wendan Cheng, Zhen                                     | Shore |
|      | Construction and Application of the SMART Model     | Zhang, Heng Qian,                                      |       |
| BigD | for Adaptive Industrial Data Collection Based on    | Qiuyue Wang, Guanqun                                   |       |
| 274  | Knowledge Graphs                                    | Su, and Lingge Meng                                    | Short |
|      | EXCON: Extreme Instance-based Contrastive           | Onur Vural, Shah                                       |       |
|      | Representation Learning of Severely Imbalanced      | Muhammad Hamdi, and                                    |       |
| BigD | Multivariate Time Series for Solar Flare Prediction | Soukaina Filali  |       |
| 564  | Tasks   | Boubrahimi   | Short |
|      |   | Manuel Blaser, Wesley                                  |       |
| BigD | YOLOv10 Computer Vision Performance                 | Porter, Luke Fuhrer, and                               |       |
| 501  | Measurement for Agricultural Vacuum Seed Meters     | Thirimachos Bourlai                                    | Short |
| BigD | A Triple Factorization-Based Coupled Latent Factor  | Yunchun Xian, Qicong Hu,                               |       |
| 567  | Analysis Model for Recommender Systems              | and Hao Wu   | Short |
|      |   | Damian Andrew Tamburri                                 |       |
| BigD | Data Science and Massive Open Online Courses        | and Willem-Jan van den                                 |       |
| 327  | (MOOCs): Key Feats and Best Practices               | Heuvel   | Short |

## **Industry and Government Program Sessions**

| I&G-1: Generative AI<br>Dec. 16, Monday, 10:30-12:30, Columbia C   |   |  |  |
|--|---|--|--|
| Paper 2 (N221) LLM Chain Ensembles for Scalable and Accurate Data Annotation (regular)   | David Farr, Nico<br>Manzonelli, Iain<br>Cruickshank, Kate<br>Starbird, and Jevin West   |  |  |
| Paper 6 (N257) Experimental Study of In-Context Learning for Text Classification and Its Application to Legal Document Review in Construction Delay Disputes (regular) | Nathaniel<br>Huber-Fliflet,<br>Jianping Zhang,<br>Peter Gronvall, and<br>Fusheng Wei  |  |  |
| Paper 9 (N217) IDNet: A Novel Identity Document Dataset via Few-Shot and Quality-Driven Synthetic Data Generation (regular)  | Lulu Xie, Yancheng<br>Wang, Hong Guan,<br>Soham Nag, Rajeev<br>Goel, Niranjan Swamy,<br>Yingzhen Yang,<br>Chaowei Xiao, Jonathan<br>Prisby, Ross<br>Maciejewski, and Jia<br>Zou |  |  |
| Paper 23 (N233) AUTORED: Automated Attack Scenario Generation Framework for Red Teaming of LLMs (short)  | Zhe Wang and<br>Mohammad Tayebi   |  |  |
| Paper 26 (N253) Generating Phishing Attacks and Novel Detection Algorithms in the Era of Large Language Models (short)   | Jeffrey Fairbanks and<br>Edoardo Serra  |  |  |
| Paper 28 (N237) Enriching Skill Taxonomies through Vector Space Models (short)   | Simone D'Amico,<br>Alessia De Santo, Fabio<br>Mercorio, and Mario<br>Mezzanzanica   |  |  |
| I&G-2: Big data Infra & Multi-modality<br>Dec. 16, Monday, 14:00-16:00, Columbia C   |   |  |  |
| Paper 1 (N239) DIVERSE: A Dataset of YouTube Video Comment Stances with a Data Programming Model (regular)   | lain Cruickshank,<br>Lynnette Ng, and Amir<br>Soofi   |  |  |
| Paper 15 (N209) INFA-FinOps for Cloud Data Integration (regular)   | Shivangi Srivastava,<br>Anant Mittal, Atam<br>Agrawal, Valentin<br>Moskovich, Michael<br>Brevard, and Mosharaf<br>Chowdhury   |  |  |

| Paper 20 (N218) Capturing Infrastructure Interdependencies for Power Outages Prediction During Extreme Events (regular)         | Sangkeun Lee, Avishek<br>Bose, Narayan Bhusal,<br>and Supriya Chinthavali  |
|---|--|
| Paper 29 (N204) GPURank: A Cloud GPU Instance Recommendation System (short)   | Shravika Mittal, Kanak<br>Mahadik, Ryan Rossi,<br>Sungchul Kim, and<br>Handong Zhao  |
| Paper 32 (N271) Addressing Spend Leakage and Optimization of Cloud Costs (short)  | Uday Chandra Bhookya,<br>Kunal Jethuri, Sanjeeva<br>Rayudu Ravuru,<br>Priyadarshi Priyadarshi,<br>and Maitreya Natu  |
| Paper 33 (N262) Forecasting Application Counts in Talent Acquisition Platforms: Harnessing Multimodal Signals using LMs (short) | Makini Chisolm-Straker<br>and Lav R. Varshney  |
| I&G-3: Modeling<br>Dec. 16, Monday, 14:00-16:00, Concord  |  |
| Paper 5 (N278) Data-Prep-Kit: getting your data ready for LLM application development (regular)                                 | David Wood, Boris Lublinsky, Alexy Roytman, Shivdeep Singh, Constantin Adam, Abdulhamid Adebayo, Sungeun An, Yuan Chi Chang, Xuan-Hong Dang, Nirmit Desai, Michele Dolfi, Hajar Emami-Gohari, Revital Eres, Takuya Goto, Dhiraj Joshi, Yan Koyfman, Mohammad Nassar, Hima Patel, Paramesvaran Selvam, Yousaf Shah, Saptha Surendran, Daiki Tsuzuku, Petros Zerfos, and Shahrokh Daijavad |
| Paper 10 (N272) WeightedMMoE: Weighted Multi-Gate Mixture-of-Experts for Multi-Source Unsupervised Domain Adaptation (regular)  | Siti Mariyah and Wayne<br>Wobcke   |
| Paper 12 (N220) HLAT: High-quality Large Language Model Pre-trained on AWS Trainium (regular)                                   | Haozheng Fan, Hao<br>Zhou, Guangtai Huang,<br>Parameswaran Raman,<br>Xinwei Fu, Gaurav<br>Gupta, Dhananjay Ram,<br>Yida Wang, and Jun<br>Huan  |
| Paper 14 (N206) Active Learning for Practical Misinformation Classification in Social Media: a Case Study on COVID-19 (regular) | Han Kyul Kim and Andy<br>Skumanich   |
|   |  |

| Paper 18 (N245) Machine Learning (ML) Classifier to Assist in Metadata Creation (regular)  | Hannah Collier, Eric<br>Enright, Sujata<br>Goswami, Chirag Shah,<br>Maggie Davis, and<br>Rachael Isphording                  |
|--|--|
| Paper 34 (N236) An explainable framework based on counterfactual explanations for multi-class financial distress prediction of small and medium enterprises) (short) | Renon Ando, Yuji<br>Kawamata, Toshihiko<br>Takeda, and Yukihiko<br>Okada   |
| I&G-4: Business and Energy<br>Dec. 18, Tuesday, 10:30-12:30, Columbia C  |  |
| Paper 3 (N235) Targeted Detection of Anomalous Merchants on Integrated Payment Platforms via Multifaceted Transaction Representation Learning (regular)              | Guanyu Lu, Xiang Lin,<br>Martin Pavlovski, Xinyu<br>Zhang, and Fang Zhou   |
| Paper 4 (N203) End-to-End Trip Energy Predictions Developed from Real-World Driving Data using Recurrent Neural Networks (regular)                                   | Shinhoon Kim, Vishnu<br>Raghupathy, Yongkang<br>Liu, Keisuke Niimi, and<br>Takahiro Mochihara                                |
| Paper 7 (N254) Counter Data Paucity through Adversarial Invariance<br>Encoding: A Case Study on Modeling Battery Thermal Runaway<br>(regular)                        | Anika Tabassum,<br>Srikanth Allu, and<br>Ramakrishnan Kannan   |
| Paper 17 (N244) ProbSAINT: Probabilistic Tabular Regression for Used Car Pricing (regular)   | Kiran Madhusudhanan,<br>Gunnar Behrens,<br>Maximilian<br>Stubbemann, and Lars<br>Schmidt-Thieme                              |
| Paper 30 (N266) Forecasting Migration Patterns and Land Border Encounters (short)  | Raquib Bin Yousuf,<br>Shengzhe Xu, Patrick<br>Butler, Brian Mayer,<br>Nathan Self, David<br>Mares, and Naren<br>Ramakrishnan |
| I&G-5: Recommender systems<br>Dec. 18, Wednesday, 10:30-12:30, Columbia A  | 4  |
| Paper 8 (N256) Multi-task Recommendation in Marketplace via Knowledge Attentive Graph Convolutional Network with Adaptive Contrastive Learning (regular)             | Xiaohan Li, Zezhong<br>Fan, Luyi Ma, Kaushiki<br>Nag, and Kannan Achan   |
| Paper 16 (N216) Optimal Transport for Efficient, Unsupervised Anomaly Detection on Industrial Data (regular)   | Abigail Langbridge,<br>Fearghal O'Donncha,<br>James Rayfield, and<br>Bradley Eck   |
| Paper 21 (N213) GRAINRec: Graph and Attention Integrated Approach for Real-Time Session-Based Item Recommendations (regular)   | Bhavtosh Rath, Pushkar<br>Chennu, David Relyea,<br>Prathyusha Kanmanth   |

|  | Reddy, and Amit Pande   |
|--|---|
| Paper 24 (N224) Exploring Query Understanding for Amazon Product Search (short)  | Chen Luo, Xianfeng<br>Tang, Hanqing Lu,<br>Yaochen Xie, Hui Liu,<br>Zhenwei Dai, LImeng<br>Cui, Ashutosh Joshi,<br>Sreyashi Nag, Yang Li,<br>Zhen Li, Rahul Goutam,<br>Jiliang Tang, Haiyang<br>Zhang, and Qi He  |
| Paper 27 (N259) CryptoPulse: Short-Term Cryptocurrency Forecasting with Dual-Prediction and Cross-Correlated Market Indicators (short) | Amit Kumar and Taoran<br>Jl   |
| Paper 35 (N229) Harnessing the Power of Graph Neural Networks for Personalized Rail Recommendations (short)                            | Bora Edizel, Sri<br>Haindavi Koppuravuri,<br>Mark Gannaway, Puja<br>Das, and Kamilia<br>Ahmadi  |
| I&G-6: Al4Science<br>Dec. 18, Wednesday, 10:30-12:30, Columbia E   | 3   |
| Paper 11 (N252) Enabling Scalable Mineral Exploration:<br>Self-Supervision and Explainability (regular)                                | Angel Daruna, Vasily<br>Zadorozhnyy, Georgina<br>Lukoczki, and Han-Pang<br>Chiu   |
| Paper 13 (N265) Accurate and Interpretable Radar Quantitative Precipitation Estimation with Symbolic Regression (regular)              | Olivia Zhang, Brianna<br>Grissom, Julian Pulido,<br>Kenia Munoz-Ordaz,<br>Jonathan He, Mostafa<br>Cham, Haotong Jing,<br>Weikang Qian, Yixin<br>Wen, and Jianwu Wang  |
| Paper 19 (N243) Monitoring Recombinant Protein Titer in Escherichia Coli Fermentations Using Filtering Techniques (regular)            | Paul Okafor, Zahed<br>Siddique, and Talayeh<br>Razzaghi   |
| Paper 22 (N268) Detecting Fraud in a Large Anonymized Voter Registration Dataset (short)   | Nahid Anwar, Amit Jain,<br>Edoardo Serra, and<br>Chad Houck   |
| Paper 25 (N215) ARIM-mdx Data System: Towards a Nationwide Data Platform for Materials Science (short)                                 | Masatoshi Hanai, Ryo<br>Ishikawa, Mitsuaki<br>Kawamura, Masato<br>Ohnishi, Norio<br>Takenaka, Kou<br>Nakamura, Daiju<br>Matsumura, Seiji<br>Fujikawa, Hiroki<br>Sakamoto, Yukinori<br>Ochiai, Tetsuo Okane,<br>Shin-Ichiro Kuroki,<br>Atsuo Yamada, Toyotaro<br>Suzumura, Junichiro |

|   | Shiomi, Kenjiro Taura,<br>Yoshio Mita, Naoya<br>Shibata, and Yuichi<br>Ikuhara                                     |
|---|--|
| Paper 31 (N202) Data Workbench For Earth and Atmospheric Science Research Community (short) | Sujata Goswami, Kyle<br>Dumas, Wade Darnell,<br>Vasile Tudor Garbulet,<br>Michael Giansiracus,<br>and Giri Prakash |
| Paper 32 (N241) Content-Aware Deep Learning Recommender System                              | Qixin Wang, Xintao Wu,<br>Kan Yao, and Han Li  |

## **Special Sessions**

| Dec. 15, Sunday  |                 |   |  |
|------------------|-----------------|---|--|
| 9:00-17:00       | Congressional C | Special Session: Machine Learning on Big<br>Data  | Alfredo<br>Cuzzocrea                                     |
| 9:00-17:00       | Regency C       | Special Session: Federated Learning on Big Data   | Francesco<br>Piccialli                                   |
| 9:00-17:00       | Sequoia         | Special Session: Intelligent Data Mining  | Uraz<br>Yavanoglu  |
|                  |                 | Dec. 16, Monday   |  |
| 8:30-18:00       | Bryce           | Joint Session Workshop #14: 2nd WS on Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment   | Teruaki<br>Hayashi<br>Naoki<br>Watanabe<br>Hiroki Sakaji |
|                  |                 | Special Session: Understanding New Markets by Data Science, Social Science, and Economics <a href="https://tetsuwaka.net/UNMDSSSE2024/schedule.html">https://tetsuwaka.net/UNMDSSSE2024/schedule.html</a>                               |  |
| 10:30-18:00      | Glacier         | Special Session: Federated Learning on Big Data <a href="https://www3.cs.stonybrook.edu/~ieeebigdat-a2024/SS_FL_BIGDATA2024_detailed_prog-ram">https://www3.cs.stonybrook.edu/~ieeebigdat-a2024/SS_FL_BIGDATA2024_detailed_prog-ram</a> | Francesco<br>Piccialli                                   |
| 10:30-18:00      | Congressional C | Special Session: Machine Learning on Big<br>Data  | Alfredo<br>Cuzzocrea                                     |
| 10:30-18:00      | Sequoia         | Special session: Privacy and Security of Big<br>Data  | Alfredo<br>Cuzzocrea                                     |
| Dec. 17, Tuesday |                 |   |  |
| 10:30-16:30      | Yosemite        | Special Session: Synergizing Mobility Data for Creating and Discovering Valuable Places <a href="https://www.panda.sys.t.u-tokyo.ac.jp/Syn_Mobil.html">https://www.panda.sys.t.u-tokyo.ac.jp/Syn_Mobil.html</a>                         | Yukio<br>Ohsawa  |
| 10:30-16:30      | Grand Teton     | Special Session: Social Cognitive Computing in Digital Education and Learning   | Jerry<br>Chun-Wei<br>Lin                                 |

| 10:30-16:30 | Glacier            | Special session: Privacy and Security of Big Data                                       | Alfredo<br>Cuzzocrea |  |
|-------------|--------------------|---|----------------------|--|
|             | Dec. 18, Wednesday |   |                      |  |
| 10:30-16:00 | Congressional A    | Special Session: HealthCare Data  | Ozgun<br>Pinarer     |  |
| 10:30-12:30 | Congressional B    | Special Session: Dataspaces and DFFT (Data Free Flow with Trust)                        | Noboru<br>Koshizuka  |  |
| 10:30-12:30 | Yosemite           | Special Session: Synergizing Mobility Data for Creating and Discovering Valuable Places | Yukio<br>Ohsawa      |  |

### **PhD Forum**

| PhD Forum: Poster Session<br>Dec. 17, Tuesday, 10:00-10:30, Regency Foyer Columbia Foyer  |   |  |
|---|---|--|
| PhD Forum: Paper Session I<br>Dec. 17, Tuesday, 10:30-11:30, Concord  |   |  |
| SP13207: Towards Trustworthy Graph Neural Networks and Their Applications in Recommender Systems  | Longfeng Wu   |  |
| SP13225: Towards a Supporting Framework for Neuro-Developmental Disorder: Considering Artificial Intelligence, Serious Games and Eye Tracking | Abdul Rehman,<br>Ilona Heldal, Diana<br>Stilwell, and Jerry<br>Chun-Wei Lin |  |
| SP13217: Time Series Causal Discovery Using a Hybrid Method   | Saima Absar and<br>Lu Zhang   |  |
| PhD Forum: Panel<br>Dec. 17, Tuesday, 11:30-12:30, Concord  |   |  |
| PhD Forum: Paper Session II<br>Dec. 17, Tuesday, 14:00-16:00, Concord   |   |  |
| SP13221: TIFG: Text-Informed Feature Generation with Large Language Models  | Xinhao Zhang and<br>Kunpeng Liu   |  |
| SP13201: Knowledge Transfer Predictive Models for Power Outage Caused by Various Types of Extreme Weather Events                              | Jangjae Lee and<br>Stephanie Paal   |  |
| SP13213: Domain-Aware LLM Routing During Generation   | Josef Pichlmeier,<br>Philipp Ross, and<br>Andre Luckow                      |  |
| SP13222: Thought Space Explorer: Navigating and Expanding Thought Space for Large Language Model Reasoning                                    | Jinghan Zhang and<br>Kunpeng Liu  |  |
| SP13208: Feature-Space Semantic Invariance: Enhanced OOD Detection for Open-Set Domain Generalization   | Haoliang Wang,<br>Chen Zhao, and<br>Feng Chen                               |  |
| SP13220: User Privacy in Skeleton-based Motion Data   | Thomas Carr and<br>Depeng Xu  |  |
| SP13206: BadSAD: Clean-Label Backdoor Attacks against Deep<br>Semi-Supervised Anomaly Detection   | He Cheng  |  |

| SP13223: Global and Local Structure Learning for Sparse Tensor Completion                           | Dawon Ahn and<br>Evangelos<br>Papalexakis  |
|---|--|
| PhD Forum: Poster Session<br>Dec. 17, Tuesday, 16:00-16:30, Regency Foyer Colum                     | bia Foyer  |
| PhD Forum: Paper Session II<br>Dec. 17, Tuesday, 16:30-17:30, Concord                               |  |
| SP13205: Leveraging Big Data Technologies for Practical Radio Frequency Fingerprinting Applications | Stefan Kunze and<br>Wolfgang Dorner  |
| SP13211: Optimizing Deployment of Homomorphic Encryption and SQL using Reinforcement Learning       | Ryan Marinelli,<br>Avald Sommervoll,<br>and Laszlo Erdodi                        |
| SP13216: Robust Hate Speech Detection Without Predefined Spurious Words                             | Xingyi Zhao  |
| SP13212: Accounting for Cancer Patients with Severe Outcomes: An Anomaly Detection Perspective      | Yang Yan,<br>Christopher<br>Lominska, Gregory<br>Gan, Hao Gao, and<br>Zhong Chen |
| SP13209: Enhancing Customer Behavior Prediction and Interpretability                                | Yu-Chung Wang,<br>Lars Arne<br>Jordanger, and<br>Jerry Chun-Wei Lin              |

## **Online Workshop Sessions**

| Dec. 15, Sunday   |                         |                                |
|---|-------------------------|--------------------------------|
| Workshop #11: The 7th International Workshop on "Big Data Engineering and Analytics in Cyber-Physical Systems" (BigEACPS'24)  | Dec 15,<br>Morning      | Chair: Akbar<br>Namin          |
| Website: <a href="https://sites.google.com/view/bigeacps24">https://sites.google.com/view/bigeacps24</a> Online meeting link: <a href="https://texastech.zoom.us/j/95432998464?pwd=CSzRVrXVFZAIGJVkGklBJrS9HWUMCV.1">https://texastech.zoom.us/j/95432998464?pwd=CSzRVrXVFZAIGJVkGklBJrS9HWUMCV.1</a>   |                         |                                |
| Workshop #12: The 2nd International Workshop on Exploring Cutting-edge Data Mining: Applications of Infrared Target Detection and Large Language Models   | Dec 15,<br>Morning      | Chair: Jinli Zhang             |
| Website: https://aidatalab.github.io/bigdata2024/pastworkshopd.html   |                         |                                |
|   |                         |                                |
| Workshop #25: IEEE Workshop on Big Data Analytics for Medical Imaging   | Dec 15,<br>Morning      | Chair: Carmen<br>Bisogni       |
| Website: <a href="https://sites.google.com/unisa.it/bdami2024">https://sites.google.com/unisa.it/bdami2024</a> Online meeting link: <a href="https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDc1Y2">https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDc1Y2</a> <a href="https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDc1Y2">https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDc1Y2</a> <a href="https://sites.google.com/unisa.it/bdami2024">https://sites.google.com/unisa.it/bdami2024</a> <a hre<="" td=""><td></td><td></td></a> |                         |                                |
| Workshop #35: The IEEE International Workshop on Large Language Models for Finance Website: <a href="https://intelligentfinance.github.io/IEEE-LLM-finance-2024/index.html">https://intelligentfinance.github.io/IEEE-LLM-finance-2024/index.html</a> Online meeting link: <a href="https://us05web.zoom.us/j/87331333630?pwd=S76ldbTMb5Pf6OuCrGIKoEFgCyAZHb.1">https://us05web.zoom.us/j/87331333630?pwd=S76ldbTMb5Pf6OuCrGIKoEFgCyAZHb.1</a>  | Dec 15,<br>Whole<br>Day | Chair: Quanzhi Li              |
| Workshop #40: Workshop on Handling Resource Constraints for/using Bigdata and Al  | Dec 15,<br>Morning      | Chair: Manikandan<br>Ravikiran |

| Website: <a href="https://lc4workshop.github.io/constraint.html">https://lc4workshop.github.io/constraint.html</a> Online meeting link: <a href="https://meet.google.com/yrz-mkbz-euu">https://meet.google.com/yrz-mkbz-euu</a>  |                         |                           |
|--|-------------------------|---------------------------|
| Workshop #45: 2nd International Workshop on Dataspaces and Digital Twins for Critical Entities and Smart Urban Communities (DSpaCES)   | Dec 15,<br>Morning      | Chair: Marco<br>Zappatore |
| Website: <a href="https://sites.google.com/unisalento.it/dspaces2024">https://sites.google.com/unisalento.it/dspaces2024</a> Online meeting link: <a href="https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV">https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV</a> <a href="https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV">https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV</a> <a href="https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV">https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV</a> <a href="https://us02web.zoom.us/j/86033008178">https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV</a> <a href="https://us02web.zoom.us/j/86033008178">https://us02web.zoom.us/j/86033008178?pwd=ZCcYnXg1n1q6pV</a> <a href="https://us02web.zoom.us/j/86033008178">https://us02web.zoom.us/j/86033008178</a> <a 4="" about"="" bsd-2024="" conf="" confeera.com="" href="https://us02web.zoom.us/j/860&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Workshop #49: The 8th IEEE International Workshop on Big Spatial Data (BSD 2024)&lt;/td&gt;&lt;td&gt;Dec 15,&lt;br&gt;Morning&lt;/td&gt;&lt;td&gt;Chair: Ashwin&lt;br&gt;Shashidharan&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Website: &lt;a href=" https:="">https://confeera.com/conf/4/bsd-2024/about</a> Online meeting link: <a href="https://ucdenver.zoom.us/j/91373774367">https://ucdenver.zoom.us/j/91373774367</a> Passcode: 425111 |                         |                           |
| Workshop #22: 1st Workshop on Robust Machine Learning for Distribution Shifts  | Dec 15,<br>Afternoon    | Chair: Chen Zhao          |
| Website: <a href="https://sites.google.com/view/robustmlds24/home">https://sites.google.com/view/robustmlds24/home</a> Online meeting link: <a href="https://baylor.zoom.us/j/2399260431?pwd=djEwUTRzOHFJVFJoK2VZRWdrZC9lQT09">https://baylor.zoom.us/j/2399260431?pwd=djEwUTRzOHFJVFJoK2VZRWdrZC9lQT09</a>  |                         |                           |
| Dec. 16, Monday  |                         |                           |
| Workshop #16: 12th International Workshop on Distributed Storage and Blockchain Technologies for Big Data  | Dec 16,<br>Morning      | Chair: Hong Tan           |
| Website: <a href="https://web.pkusz.edu.cn/itfna/workshop24/">https://web.pkusz.edu.cn/itfna/workshop24/</a> Online meeting link: <a href="https://meeting.tencent.com/dm/Yf8hmdH0hf2f">https://meeting.tencent.com/dm/Yf8hmdH0hf2f</a> password: 241218   |                         |                           |
| Combined Workshops: Workshop #26: 8th International Workshop on Big Data Analytics for Cyber Intelligence and Defense (BDA4CID 2024) Website: <a href="https://bda4cid.github.io/">https://bda4cid.github.io/</a> Workshop #27: 3rd International Workshop on Big Data Analytics for Health and Medicine (BDA4HM 2024)   | Dec 16,<br>Whole<br>Day | Chair: Stephen<br>McGough |

| Website: <a href="https://bda4hm.github.io/">https://bda4hm.github.io/</a> Workshop #28: 4th International Workshop on Big Data Analytics for Sustainability (BDA4S 2024) Website: <a href="https://bda4s.github.io/">https://bda4s.github.io/</a>   |                         |  |
|--|-------------------------|--|
| Online meeting link: <a href="https://newcastleuniversity.zoom.us/j/83598615679">https://newcastleuniversity.zoom.us/j/83598615679</a> password: <a href="mailto:bDA4Work">BDA4Work</a>  |                         |  |
| Workshop #41: Fourth International Workshop on Data science for equality, inclusion and well-being challenges (DS4EIW 2024)  | Dec 16,<br>Morning      | Chair: Tania<br>Cerquitelli  |
| Website: <a href="https://ds4eiw.github.io/4th-DS4EIW/">https://ds4eiw.github.io/4th-DS4EIW/</a> Online meeting link: <a href="https://cnrs.zoom.us/j/98068959736?pwd=RpAjX0yZdeYcsWWIxlwshB1uR8pTA4.1">https://cnrs.zoom.us/j/98068959736?pwd=RpAjX0yZdeYcsWWIxlwshB1uR8pTA4.1</a> Passcode: XFZJA1 |                         |  |
| Workshop #50: 2nd International Workshop on Creating Big Data for Morals, Ethics, and Values in Natural Language in an Automatically Inferable Format  | Dec 16,<br>Morning      | Chair: Keisuke<br>Nakamura   |
| Website: https://knowrel.com/IEEE_BIGDATA_2024_BIGETHICS/ Online meeting link: https://us06web.zoom.us/j/5966061613?pwd=lh52XJVjwCHpejDY 4ArvyqOYHb4dLu.1&omn=83457299537  |                         |  |
| Combined Workshops: #30 Al-Powered Renewable<br>Energy Forecasting: Techniques and Challenges (AIPREF)<br>& #32: Al-driven Agriculture: Opportunities and Challenges<br>& #33: Cultural Heritage &BigData: Opportunities and<br>Challenges   | Dec 16,<br>Whole<br>Day | Chairs: Ester<br>Zumpano, Luciano<br>Caroprese,<br>Tommaso Ruga,<br>Eugenio Vocaturo |
| Website: <a href="https://sites.google.com/view/aipref2024/">https://sites.google.com/view/aipref2024/</a> Website:  |                         |  |
| https://sites.google.com/view/aida-2024/home-page Website:   |                         |  |
| https://sites.google.com/dimes.unical.it/chbdbigdata2024/ho  |                         |  |
| me-page  |                         |  |
| Online meeting link:<br>https://teams.microsoft.com/l/meetup-join/19%3ameeting_  |                         |  |
| NWI4YjYzM2UtNmY1Ni00NjBlLTlmZjEtMTdhMzE4ZGRIOWY  |                         |  |
| <u>z%40thread.v2/0?context=%7b%22Tid%22%3a%227519d0c</u>   |                         |  |
| d-2106-47d9-adcb-320023abff57%22%2c%220id%22%3a%2<br>25b626ede-08e8-4553-9d1c-fcc4b1897cab%22%7d   |                         |  |
|  |                         |  |

| Dec. 17, Tuesday  |                    |                  |
|---|--------------------|------------------|
| Workshop #21: 5th International Workshop on User Understanding from Big Data  | Dec 17,<br>Morning | Chair: Wutao Wei |
| Website: <a href="https://u2bigdata.github.io/">https://u2bigdata.github.io/</a> Online meeting link: <a href="https://cisco.webex.com/cisco/j.php?MTID=m9e14f547235a05afb6">https://cisco.webex.com/cisco/j.php?MTID=m9e14f547235a05afb6</a> 40b5ce92b77d87  |                    |                  |
| Workshop #29: Trustworthy Machine Learning for Healthcare   | Dec 17,<br>Morning | Chair: Xiao Shou |
| Website: <a href="https://sites.google.com/view/trustml4health24/">https://sites.google.com/view/trustml4health24/</a> Online meeting link: <a href="https://baylor.zoom.us/j/3198262276?pwd=GLIXgCpXf0tVasEXIVMb6BPS4jzpLV.1">https://baylor.zoom.us/j/3198262276?pwd=GLIXgCpXf0tVasEXIVMb6BPS4jzpLV.1</a> |                    |                  |

| Dec. 18, Wednesday  |                    |             |  |
|---|--------------------|-------------|--|
| 37: IEEE 5th Workshop on High Performance Computing, Big Data Analytics, and Integration for Multi-Omics Biomedical Data (HPC-BOD)  | Dec 18,<br>Morning | Fahad Saeed |  |
| Website: <a href="https://hpcbod.cs.fiu.edu/">https://hpcbod.cs.fiu.edu/</a> Online meeting link: <a href="https://fiu.zoom.us/j/89173662351">https://fiu.zoom.us/j/89173662351</a> |                    |             |  |

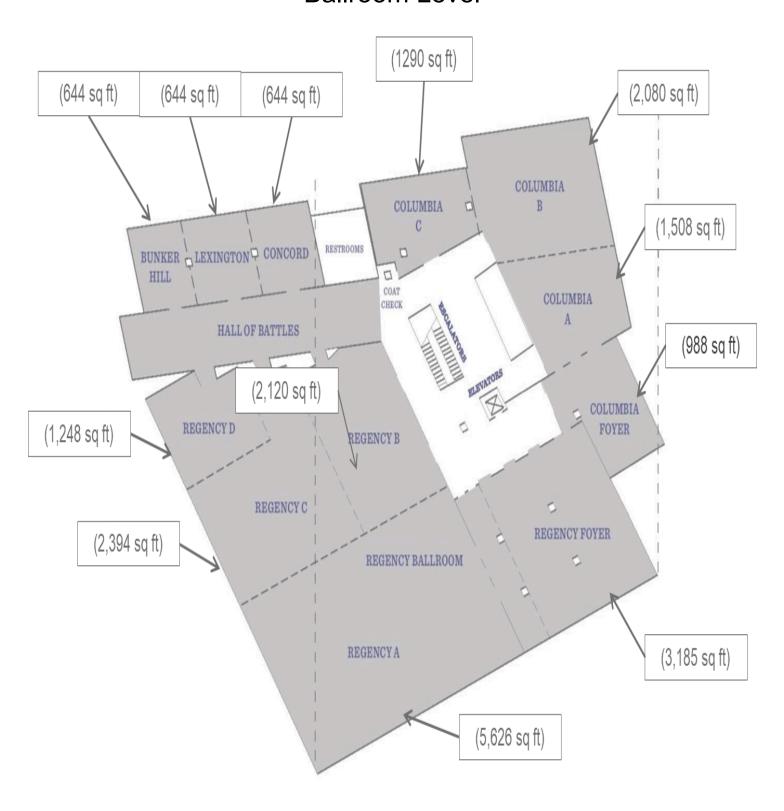
# **Online Challenge Cup Sessions**

| Dec. 15, Sunday  |                       |   |
|--|-----------------------|---|
| Challenge Cup #5: Suicide ideation detection on social media  Website: <a href="https://competitionpolyu.github.io/">https://competitionpolyu.github.io/</a> | Dec. 15,<br>Morning   | Chair: Jun Li<br>21118786r@con<br>nect.polyu.hk |
| Challenge Cup #4: Characterizing User Behavior in Social Networks: Propagation, Prediction, and Sensemaking Website:   | Dec. 15,<br>Afternoon | Chair: Qingyun<br>Sun<br>sunqy@buaa.ed<br>u.cn  |
| https://social-network-competition-gxqpe2ab8eh9atpe6hneu3.   |                       |   |

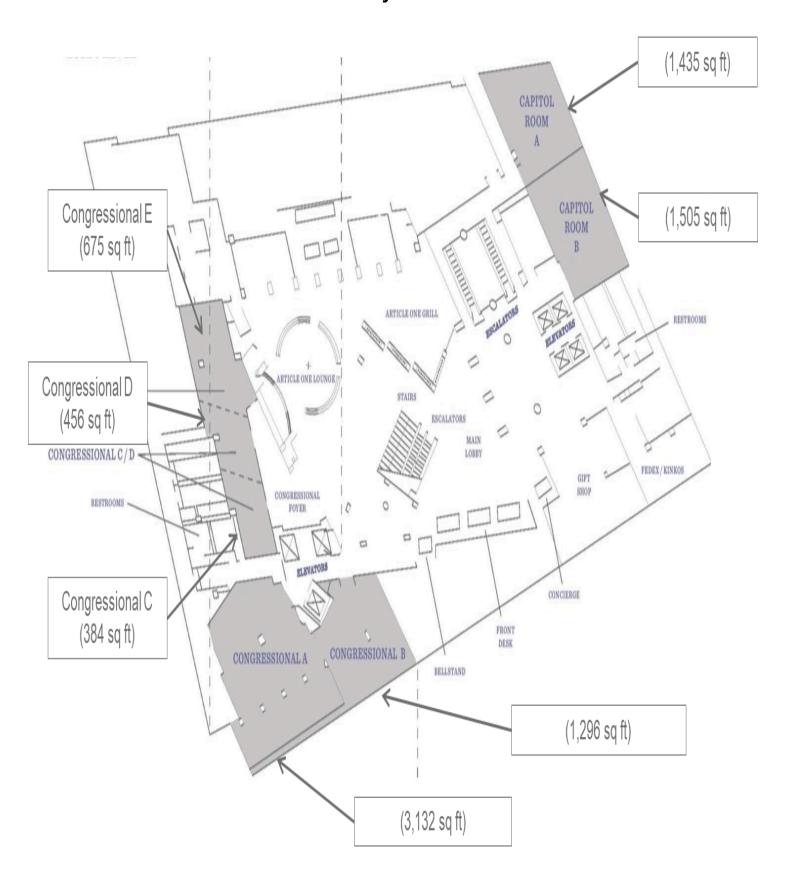
| streamlit.app/  |                         |  |  |  |
|---|-------------------------|--|--|--|
| Dec. 16, Monday   |                         |  |  |  |
| Challenge Cup #3: Building Extraction Generalization Challenge 2024  Website: <a href="https://www.kaggle.com/competitions/building-extraction-generalization-2024">https://www.kaggle.com/competitions/building-extraction-generalization-2024</a> | Dec. 16,<br>Morning     | Chair:<br>Shenglong Chen<br>chen-sl@csis.u-t<br>okyo.ac.jp |  |  |
| Dec. 17, Tuesday  |                         |  |  |  |
| Challenge Cup #2: Optimized Road Damage Detection Challenge (ORDDC'2024)  Website: <a href="https://orddc2024.sekilab.global/">https://orddc2024.sekilab.global/</a>  | Dec. 17<br>Whole<br>Day | Chair: Deeksha<br>Arya<br>deeksha.arya12<br>11@gmail.com   |  |  |
| Challenge Cup #6: Challenges of Trustworthy AI in Distribution Shifts and Algorithmic Fairness  Website: <a href="https://bigdatacup-e2j7tqwypbrkm8zsmqstmm.streamlit.app/">https://bigdatacup-e2j7tqwypbrkm8zsmqstmm.streamlit.app/</a>            | Dec. 17,<br>Morning     | Chair: Minglai<br>Shao<br>shaoml@tju.edu.<br>cn            |  |  |

### **Hotel Floor Layout**

#### **Ballroom Level**



### **Lobby Level**



#### 2nd Floor Conference

