Sourav S Bhowmick

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College of Computing & Data Science (CCDS)
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April 30, 2025
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Research Areas

Data management, human-data interaction, data analytics.

Education

- **Nanyang Technological University** — Singapore
  Ph.D. Computer Engineering — *1997 - 2001*
- **Griffith University** — Queensland, Australia
  Master of Computing — *1995-1997*
- **Visvesvaraya Regional College of Engineering (VRCE)**[1] — Nagpur, India
  B.Engg Mechanical Engineering — *1989-1993*

Academic Positions

- **Nanyang Technological University** — Singapore
  Associate Professor — *May 2024 - present*
  – College of Computing & Data Science (CCDS)
- **Nanyang Technological University** — Singapore
  Associate Professor — *October 2005 - April 2024*
  – School of Computer Science & Engineering (SCSE)
- **Xidian University** — China
  Huashan Talent Visiting Professor — *March 2022 - February 2025*
  – School of Computer Science & Technology
- **Hong Kong Baptist University** — Hong Kong SAR
  Adjunct Associate Professor — *July 2021 - June 2023*
  – Department of Computer Science
- **Nanyang Technological University** — Singapore
  Assistant Professor — *June 2001 - Sept. 2005*
  – School of Computer Science & Engineering (SCSE)
- **Nanyang Technological University** — Singapore
  Singapore-MIT Alliance Fellow — *July 2005 - June 2013*
  – Computation and Systems Biology (CSB)
- **Fudan University** — Shanghai, China
  Senior Visiting Professor — *Jan 2013 - Dec 2013*
  – School of Computer Science

- **Massachusetts Institute of Technology (MIT)** — Cambridge, USA
  Visiting Associate Professor — *June 2007 - May 2013*
    - Department of Biological Engineering

Awards & Honours

Real-world Users of Selected Research (Practical Impact)

- *[DARE project]* CLOSET, a state-of-the-art comprehensive COI detection and management system has been deployed in **100 submission cycles in 27 venues** including premium conferences such as SIGMOD, VLDB, and LICS (2020 - present). It is also interfaced with Microsoft's CMT (`https://cmt3.research.microsoft.com/docs/help/chair/conflicts.html#closet`). CLOSET has influenced changes to longstanding COI policies and management in premium data management venues.

- *[TRUSS project]* A suite of technology-enabled database education systems (e.g., NEURON, LANTERN, ARENA) has been accessed by more than **5,000** distinct users in more than **80** distinct institutions. Surveys of learners show that they benefit from them in learning relational query processing.

- gRNA and Hyperthesis, XML querying and workflow systems for bioinformatics, were part of the product of *HeliXense Pte Ltd*, Singapore (2002 - 2006).

Editorial Boards

Active

- **Distributed and Parallel Databases (DAPD) Journal**
  Co-Editor-In-Chief *Jan 2025 - present*
  – Springer-Verlag

- **The VLDB Journal**
  Review Board Member *2025 - present*
  – Springer-Verlag

- **SIGMOD Record**
  Information Director *2021 - present*
  – ACM SIGMOD

Past

- **Distributed and Parallel Databases (DAPD) Journal**
  Survey Co-Editor *2021 - 2024*
  – Springer-Verlag

- **IEEE Transactions on Knowledge & Data Engineering (TKDE)**
  Associate Editor *2019 - 2023*
  – IEEE Computer Society

- **Proceedings of the ACM on Management of Data (PACMMOD)**
  Associate Editor *Apr 2022 -Apr 2023*
  – ACM

- **Proceedings of the VLDB Endowment (PVLDB)**
  Associate Editor *Apr 2021 -Aug 2022*
  – VLDB Endowment

- **SIGMOD Record**
  Associate Information Director *2019 - 2021*
  – ACM SIGMOD
- **Distributed and Parallel Databases (DAPD) Journal**
  Editorial Board *2012 - 2021*
  – Springer-Verlag
- **Journal of the Association for Information Science & Technology (JASIST)**
  Editorial Board *2016 - 2021*
  – Wiley
- **Int. Journal Trans. on Large-Scale Data & Knowledge Centered Systems (TLDKS)**
  Editorial Board *2014*
  – Special Issue on Advanced Techniques for Cloud Data Management
  – Springer-Verlag
- **Int. Journal of Data Mining, Modelling & Management (IJDMMM)**
  Editorial Board *2008 - 2017*
  – Inderscience
- **International Journal of Digital Information Management (JDIM)**
  Editorial Board *2004 - 2016*
- **International Journal of Data Warehousing and Mining**
  Editorial Review Board *2008 - 2016*
  – Idea Publishing Group
- **Data and Knowledge Engineering (DKE) Journal**
  Guest Editor *2008*
  – Elsevier Science
  – Special Issue on XML Schema and Data Management, 65(2)
- **Data and Knowledge Engineering (DKE) Journal**
  Guest Editor *2007*
  – Elsevier Science
  – Special Issue on Web Data and Schema Management, 60(2)
- **Data and Knowledge Engineering (DKE) Journal**
  Guest Editor *2005*
  – Elsevier Science
  – Special Issue on Biological Data Management, 53(1)

Steering Committee/Advisory Board Member

- **Board of Trustees of the VLDB Endowment**
  Trustee *2024-2029*
- **Joint DB Task Force on Reviewing Processes**
  Co-chair *2023-present*
- **SIGMOD Executive Committee**
  Member *2021 - present*

- **PVLDB Advisory Board**
  Regular Member   *2021 - present*
- **JASIST Editorial Advisory Board**
  Regular Member   *2021 - present*
- **Diversity and Inclusion in Database Conference Venues**
  Co-Lead   *2021 - 2023*
- **International Conference on Database Systems for Advanced Applications**
  Member   *2018 - 2024*

Award Committees

- **Jim Gray Dissertation Awards Committee**
  Member   *2025-present*
- **SIGMOD Awards Committee**
  Member   *2024-present*
- **Best Paper Award Committee**   CODS-COMAD
  Member   *2024*

Current Research Projects

- *Data Management & Analytics*
  - `GREASE`: Graph Querying and Analytics on a Single Machine
  - `TRUSS`: Technology-enabled Learning of Query Processing
  - `DARE`: Data-driven Review Management
  - `INGOT`: Towards *In Silico* Signaling Network-driven Combination Therapy

- *Human-data Interaction*
  - `HINT`: Towards Human Interaction with Network Data
  - `PIANO`: Psychology-Informed Data-centric Computing
  - `ARTIST`: Abstract Art-Inspired Visualization of Data

Invited Talks and Tutorials

1. **Xidian University Annual Conference on International Cooperation**   Xi'an, China
   Invited Talk   *Dec 2024*
   - Visual Graph Search: Opportunities and Challenges

2. **2nd Macau Symposium on Data Science**   Macau, China
   Keynote Talk   *Nov 2024*
   - Data-driven COI Management: From Socio-Technical Data Systems Research to Impact

3. **JST CREST Symposium**   Gifu, Japan
   Keynote Talk   *July 2024*

- Visual Graph Search: Opportunities and Challenges

4. **50th ACM SIGMOD International Conference on Management of Data** Santiago, Chile
   Tutorial *June 2024*
   - Cognitive Psychology Meets Data Management: State of the Art and Future Directions.

5. **TU Eindhoven** Eindhoven, The Netherlands
   Invited Talk *Jan 2024*
   - What If Leonardo Was a Database Educator?

6. **Xidian University** Xi'an, China
   Invited Talk *Dec 2023*
   - To Draw is Human: Toward No-Code Subgraph Search.

7. **CCS International Symposium** Tsukuba, Japan
   Invited Talk *Oct 2023*
   - To Draw is Human: Toward No-Code Subgraph Search.

8. **Singapore Data Science Consortium** Singapore
   Invited Talk *July 2023*
   - Data-driven Management of COI in Peer Review Venues: Data Science in the Real World.

9. **Data Systems Education Workshop (Co-located with SIGMOD)** Seattle, USA
   Keynote Talk *June 2023*
   - Human Learners of Relational Query Processing: Who Cares?

10. **POSTECH** Pohang, South Korea
    Invited Talk *November 2022*
    - *"Tell Me and I Forget, Teach Me and I May Remember, Involve Me and I Learn"*: Towards Technology-enabled Learning of Relational Query Processing.

11. **Hong Kong University of Science & Technology (HKUST)** Virtual
    Invited Talk *November 2022*
    - To Draw is Human: Towards Usable Visual Subgraph Search.

12. **48th ACM SIGMOD International Conference on Management of Data** Chicago, USA
    Tutorial *June 2022*
    - Data-driven Visual Query Interfaces for Graphs: Past, Present, and (Near) Future.

13. **Hunan University, China** Virtual
    Invited Talk *March 2022*
    - We Don't Need No Education: From Building for Coders to Building for Users.

14. **POSTECH** Virtual
    Invited Talk *Jul 2021*
    - TED Learn: Towards Technology-Enabled Database Education.

15. **The Dutch Seminar on Data Systems Design** Virtual
    Invited Talk *Apr 2021*
    - TED Learn: Towards Technology-Enabled Database Education.

16. **Future of Adult Learning Research Symposium (FoALR)** Singapore
    Invited Talk *Nov 2019*
    - KANDINSKY: Abstract Art Meets YouTube Discussion Visualization for Online Learning.

17. **School of Cyber Engineering, Xidian University** Xi'an, China
    Invited Talk *Sept 2019*

- Visual > Text.

18. **Singaporean Researcher Global Summit** Singapore
Invited Talk *Aug 2019*
  - Learning to Say No!

19. **GRADES-NDA Workshop (Co-located with SIGMOD)** Amsterdam, The Netherlands
Keynote Talk *June 2019*
  - We Don't Need No Education: From Building for Coders to Building for Users.

20. **Big Data & AI Workshop, University of Hong Kong** Hong Kong
Invited Talk *Apr 2019*
  - Don't Make Me Learn: From Building for Coders to Building for Users.

21. **Pohang University of Science and Technology (POSTECH)** Pohang, South Korea
Invited Talk *Mar 2019*
  - Visual > Text.

22. **37th International Conference on Conceptual Modeling (ER)** Xi'an, China
Tutorial *Oct 2018*
  - Visual Querying on Graphs: Models and Techniques.

23. **Data Science & Blockchain Workshop (in conjunction with ER)** Xi'an, China
Invited Talk *Oct 2018*
  - Network Analytics Meets Drug Combination Discovery.

24. **School of Cyber Engineering, Xidian University** Xi'an, China
Invited Talk *Oct 2018*
  - Data Management in the AI World: An Area Whose Time has Come and Gone?

25. **Artificial Intelligence Research Center (AIRC)** Tokyo, Japan
Invited Talk *Jul 2018*
  - Graph Querying is Dead, Long Live (Visual) Graph Querying!

26. **Pohang University of Science and Technology (POSTECH)** Pohang, South Korea
Invited Talk *Jul 2018*
  - Graph Querying is Dead, Long Live (Visual) Graph Querying!

27. **Hong Kong Baptist University** Hong Kong
Invited Talk *May 2018*
  - Data Management in the AI World: An Area Whose Time has Come and Gone?

28. **43rd International Conference on Very Large Data Bases (VLDB)** Munich, Germany
Tutorial *Aug 2017*
  - Summarizing Static and Dynamic Big Graphs.

29. **Pohang University of Science and Technology (POSTECH)** Pohang, South Korea
Invited Talk *Aug 2017*
  - Graph Summarization: What Makes a Good Summary?

30. **43rd ACM SIGMOD International Conference on Management of Data** Chicago, USA
Tutorial *May 2017*
  - Graph Querying Meets HCI: State of the Art and Future Directions.

31. **Oracle** Singapore
Invited Talk *Mar 2017*
  - To Invent or To Innovate?: The Role of Academic Research.

32. **IEEE International Conference on Knowledge Engineering & Applications** Singapore
    Keynote Talk *Sept 2016*
    - Network Analytics Meets Drug Combination Discovery.

33. **Hong Kong Baptist University** Hong Kong
    Invited Talk *May 2016*
    - Towards In Silico Network-driven Combination Therapy: A ~~Big~~ Small Data Problem.

34. **University of Macau** Macau
    Invited Talk *Nov 2015*
    - HumanDB: Towards Bridging the Chasm Between Data Management and HCI.

35. **Kyoto University** Kyoto, Japan
    Invited Talk *Jul 2015*
    - HCI-aware Data Management: Towards Bridging the Chasm Between Data Management and HCI.

36. **Eindhoven University of Technology (TU/e)** Eindhoven, The Netherlands
    Invited Talk *June 2015*
    - HCI-aware Data Management: Towards Bridging the Chasm Between Data Management and HCI.

37. **Pohang University of Science and Technology (POSTECH)** Pohang, South Korea
    Invited Talk *Nov 2014*
    - Towards Bridging the Chasm Between Graph Data Management and HCI.

38. **25th Int. Conf. on Database & Expert Systems Applications (DEXA)** Munich, Germany
    Keynote Talk *Sept 2014*
    - DB ⋈ HCI: Towards Bridging the Chasm Between Graph Data Management and HCI.

39. **1st International Conf. on Big Data & Smart Computing (BigComp)** Bangkok, Thailand
    Invited Talk *Jan 2014*
    - INGOT: Towards Network-driven In Silico Combination Therapy.

40. **Dept. of Social Informatics, Kyoto University** Kyoto, Japan
    Invited Talk *Jul 2013*
    - Adventures with Social Images: The SONAR Experience.

41. **Kyoto University** Kyoto, Japan
    Invited Talk *Jul 2013*
    - Towards In Silico Network-driven Combination Therapy: A ~~Big~~ Small Data Problem.

42. **5th Int. Workshop with Mentors for Young Researchers (iDB)** Sapporo, Japan
    Invited Tutorial *Jul 2013*
    - Managing Social Image Tags: Methods and Applications.

43. **International Symposium of Health Systems Complexity** Singapore
    Invited Talk *Jul 2013*
    - Towards In Silico Network-driven Combination Therapy: A ~~Big~~ Small Data Problem.

44. **2nd Health Systems Complexity Workshop** Singapore
    Invited Talk *Mar 2013*
    - Towards In Silico Network-driven Combination Therapy: A Computational and Systems Biology-based Approach.

45. **8th Int. Conf. on Advanced Data Mining & Applications (ADMA)** Nanjing, China
    Tutorial *Dec 2012*

- Clustering and Summarizing Biological Networks: The state-of-the art.

46. **17th Int. Conf. on Database Systems for Advanced Applications** — Busan, South Korea
Tutorial — Apr 2012
- Storing, Querying, Summarizing and Comparing Molecular Networks: The State-of-the-Art.

47. **International Workshop on Advanced Data Management (ADM)** — Shanghai, China
Invited Talk — Dec 2011
- VIAGRA: Towards Visual Interaction-Aware Graph Querying Framework.

48. **3rd Int. Workshop with Mentors for Young Researchers (iDB)** — Kyoto, Japan
Invited Talk — Aug 2011
- Being David in Data Management World of Goliaths.

49. **15th Pacific-Asia Conf. on Know. Discovery & Data Mining (PAKDD)** Shenzhen, China
Tutorial — May 2011
- Social Image Tags: From Motivation to Mining.

50. **16th Int. Conf. on Database Systems for Advanced Applications** — Hong Kong
Tutorial — Apr 2011
- Managing Social Image Tags: From Motivation to Applications.

51. **Dept of Comp. Science, Missouri University of Science and Technology** — Rolla, USA
Invited Talk — June 2010
- GBLENDER: Visual Graph Query Formulation Meets Query Processing.

52. **Waseda University** — Japan
Invited Talk — Nov 2009
- Blog Cascade Affinity.

53. **13th Pacific-Asia Conf. on Know. Discovery & Data Mining** — Bangkok, Thailand
Tutorial — Apr 2009
- Mining Evolution of Complex-Structured Data.

54. **Joint International Conf. on APWeb/WAIM** — Suzhou, China
Tutorial — Apr 2009
- Mining Evolution of Complex-Structured Data.

55. **9th International Conf. on Web-Age Information Management** — Zhangjiajie, China
Tutorial — Jul 2008
- Managing Changes to XML Data: The State-Of-The-Art.

56. **Kyoto University** — Kyoto, Japan
Invited Talk — Jul 2008
- XBlend: Visual XML Query Formulation Meets Query Processing.

57. **10th Asia-Pacific Web Conference (APWeb)** — Shenyang, China
Tutorial — Apr 2008
- Web Evolution Management: Detection, Monitoring, and Mining.

58. **Kyoto University** — Kyoto, Japan
Invited Talk — June 2007
- Towards Da Vinci's Notebook: Empowering Scientists to Explore Data.

59. **Kyoto University** — Kyoto, Japan
Invited Talk — Nov 2006
- XANADUE: Scalable XML Change Detection in Relational Databases.

60. **25th International Conference on Conceptual Modelling (ER)**   Tucson, USA
Tutorial   *Nov 2006*
   - Web Change Management and Delta Mining: Opportunities and Solutions.

61. **Shanghai-Jiatong University**   Shanghai, China
Invited Talk   *May 2006*
   - Towards Da Vinci's Notebook: Empowering Scientists to Explore Data.

62. **Tsinghua University**   Beijing, China
Invited Talk   *May 2005*
   - One Size Does Not Fit All: Research Challenges in Bioimaging Data Management.

63. **Kyoto University**   Kyoto, Japan
Invited Talk   *Apr 2005*
   - Towards Privacy Preserving Data Integration.

64. **The University of Queensland**   Brisbane, Australia
Invited Talk   *June 2000*
   - Detecting and Representing Page-Level Relevant Web Deltas in WHOWEDA.

65. **The University of South Australia**   Adelaide, Australia
Invited Talk   *Apr 2000*
   - Detecting and Representing Page-Level Relevant Web Deltas Using Web Join.

Publication Statistics

- Total number of citations: **6721** (Google Scholar), h-index: **40** (as of April 2025).
- Number of journal papers: 81
- Number of conference papers: 204
- Number of workshop papers: 18
- Number of abstracts/extended abstracts: 12
- Number of books: 4
- Number of book chapters: 7
- Number of proceedings: 9

Refereed Journals

1. **How Diverse Are Our Conference Review Boards?** Sourav S Bhowmick, Divesh Srivastava. *SIGMOD Record*, 55(2), ACM, June 2025.

2. **An Efficient Framework for Secure Dynamic Skyline Query Processing in the Cloud.** Peng Chen, Baochao Xu, Hui Li, Weiguo Wang, Yanguo Peng, Sourav S. Bhowmick, Xiaofeng Chen, Jiangtao Cui. *Data Science and Engineering (DSE)*, 10(1), Springer-Verlag, March 2025 (**IF = 5.1**).

3. **Data-driven PC-chair-in-the-loop Formation of Program Committees: An EDBT 2023 Experience.** Sourav S Bhowmick, Katja Hose. *SIGMOD Record*, 53(2), ACM, June 2024.

4. **Diversity, Equity and Inclusion Activities in Database Conferences: A 2023 Report.**
Sihem Amer-Yahia, Divyakant Agrawal, Yael Amsterdamer, Sourav S. Bhowmick, Renata Borovica-Gajic, Jesús Camacho-Rodríguez, Jinli Cao, Barbara Catania, Panos K. Chrysanthis, Carlo Curino, Amr El Abbadi, Avrilia Floratou, Juliana Freire, Stratos Idreos, Vana Kalogeraki, Sujaya Maiyya, Alexandra Meliou, Madhulika Mohanty, Fatma Özcan, Liat Peterfreund, Soror Sahri, Sana Sellami, Roee Shraga, Utku Sirin, Wang-Chiew Tan, Bhavani Thuraisingham, Yuanyuan Tian, Genoveva Vargas-Solar, Meihui Zhang, Wenjie Zhang. *SIGMOD Record*, 53(2), ACM, June 2024.

5. **DKWS: A Distributed System for Keyword Search on Massive Graphs.** Jiaxin Jiang, Byron Choi, Huang Xin, Jianliang Xu, Sourav S Bhowmick. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 36(5), IEEE CS, April 2024.

6. **Peer-Reviewing Processes and Incentives: Data Management Community Survey Results.** Alexandra Meliou, Sourav S. Bhowmick, Karl Aberer, Divyakant Agrawal, Angela Bonifati, Vanessa Braganholo, Floris Geerts, Wolfgang Lehner, Divesh Srivastava. *SIGMOD Record*, 52(4), ACM, December 2023.

7. **PANE: Scalable and Effective Attributed Network Embedding.** Renchi Yang, ieming Shi, Xiaokui Xiao, Yin Yang, Sourav S. Bhowmick, Juncheng Liu. *The VLDB Journal*, Springer-Verlag, 32(6), August 2023 **(Invited, Best Papers of VLDB 2021)**.

8. **CLOSET: Data-Driven COI Detection and Management in Peer-Review Venues.** Sourav S Bhowmick. *Communication of the ACM (CACM)*, 66(7), ACM, July 2023 **(Special section highlighting cutting-edge research and innovation emerging from East Asia and Oceania)**.

9. **To Draw Is Human: Toward No-Code Subgraph Search.** Sourav S Bhowmick, Byron Choi. *Communication of the ACM (CACM)*, 66(7), ACM, July 2023 **(Special section highlighting cutting-edge research and innovation emerging from East Asia and Oceania)**.

10. **Diversity, Equity and Inclusion Activities in Database Conferences: A 2022 Report.**
Sihem Amer-Yahia, Divyakant Agrawal, Yael Amsterdamer, Sourav S. Bhowmick, Angela Bonifati, Renata Borovica-Gajic, Jesús Camacho-Rodríguez, Barbara Catania, Panos K. Chrysanthis, Carlo Curino, Jérôme Darmont, Gillian Dobbie, Amr El Abbadi, Avrilia Floratou, Juliana Freire, Alekh Jindal, Vana Kalogeraki, Sujaya Maiyya, Alexandra Meliou, Madhulika Mohanty, Behrooz Omidvar-Tehrani, Fatma Özcan, Liat Peterfreund, Wenny Rahayu, Shazia Sadiq, Sana Sellami, Utku Sirin, Wang-Chiew Tan, Bhavani Thuraisingham, Yuanyuan Tian, Pınar Tözün, Genoveva Vargas-Solar, Neeraja Yadwadkar, Victor Zakhary, Meihui Zhang. *SIGMOD Record*, 52(2), ACM, June 2023.

11. **PIANO: Influence Maximization Meets Deep Reinforcement Learning.** Hui Li, Mengting Xu, Sourav S Bhowmick, Shafiq Joty, Changsheng Sun, Jiangtao Cui. *IEEE Transactions on Computational Social Systems (IEEE TCSS)*, 10(3), IEEE CS, June 2023.

12. **Meta-analytic Connectivity Modelling of Functional Magnetic Resonance Imaging Studies in Autism Spectrum Disorders.** Alicia M. Goodwill, Li Tong Low, Peter T. Fox, P. Mickle Fox, Kenneth K. Poon, Sourav S. Bhowmick, S. H. Annabel Chen. *Brain Imaging and Behaviour*, Springer, 2023.

13. **How Connected Are Our Conference Review Boards?** Sourav S Bhowmick. *SIGMOD Record*, ACM, 51(4), December 2022.

14. **Towards Technology-Enabled Learning of Relational Query Processing.** Sourav S Bhowmick, Hui Li. *IEEE Data Engineering Bulletin*, IEEE CS, September 2022 **(Invited)**.

15. **Towards Automatic Support for Leading Court Debates: A Novel Task Proposal & Effective Approach of Judicial Question Generation.** Conghui Zhu, Changzhen Ji, Yating Zhang, Xiaozhong Liu, Adam Jatowt, Sourav S Bhowmick, Changlong Sun, Tiejun Zhao. *Neural Computing and Applications (NCAA)*, 34(19), Springer, August 2022.

16. **Diversity and Inclusion Activities in Database Conferences: A 2021 Report.** Sihem Amer-Yahia, Yael Amsterdamer, Sourav S. Bhowmick, Angela Bonifati, Philippe Bonnet, Renata Borovica-Gajic, Barbara Catania, Tania Cerquitelli, Silvia Chiusano, Panos K. Chrysanthis, Carlo Curino, Jérôme Darmont, Amr El Abbadi, Avrilia Floratou, Juliana Freire, Alekh Jindal, Vana Kalogeraki, Georgia Koutrika, Arun Kumar, Sujaya Maiyya, Alexandra Meliou, Madhulika Mohanty, Felix Naumann, Nele Sina Noack, Fatma Özcan, Liat Peterfreund, Wenny Rahayu, Wang-Chiew Tan, Yuanyuan Tian, Pınar Tözün, Genoveva Vargas-Solar, Neeraja Yadwadkar, Meihui Zhang. *SIGMOD Record*, 51(2), ACM, June 2022.

17. **FLAG: Towards Graph Query Autocompletion for Large Graphs.** Peipei Yi, Jianping Li, Byron Choi, Sourav S. Bhowmick, Jianliang Xu. *Data Science and Engineering (DSE)*, 7(2), Springer-Verlag, May 2022.

18. **GFocus: User Focus-based Graph Query Autocompletion.** Peipei Yi, Byron Choi, Zhewei Zhang, Sourav S Bhowmick, Jianliang Xu. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 34(4), IEEE CS, April 2022.

19. **No PANE, No Gain: Scaling Attributed Network Embedding in a Single Server.** Renchi Yang, Jieming Shi, Xiaokui Xiao, Yin Yang, Sourav S Bhowmick, Juncheng Liu. *SIGMOD Record*, 51(1), ACM SIGMOD, March 2022 **(2021 ACM SIGMOD Research Highlights Award Paper)**.

20. **Efficient Shapelet Discovery for Time Series Classification.** Guozhong Li, Byron Choi, Jianliang Xu, Sourav S Bhowmick, Kwok-Pan Chun, Grace Wong. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 34(3), IEEE CS, March 2022.

21. **A Generic Ontology Framework for Indexing Keyword Search on Massive Graphs.** Jiaxin Jiang, Byron Choi, Jianliang Xu, Sourav S Bhowmick. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 33(6), IEEE CS, June 2021.

22. **SURGE: Continuous Detection of Bursty Regions Over a Stream of Spatial Objects.** Kaiyu Feng, Guo Tao, Gao Cong, Sourav S Bhowmick, Shui Ma. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 32(11), IEEE CS, November 2020.

23. **FERRARI: An Efficient Framework for Visual Exploratory Subgraph Search in Graph Databases.** Chaohui Wang, Miao Xie, Sourav S Bhowmick, Byron Choi, Xiaokui Xiao, Shuigeng Zhou. *The VLDB Journal*, 29(5), Springer-Verlag, September 2020.

24. **FROST: Movement History-conscious Facility Relocation.** Meng Wang, Hui Li, Jiangtao Cui, Sourav S Bhowmick, Ping Lui. *ACM Transactions on Intelligent Systems and Technology (ACM TIST)*, 11(1), pp. 1-26, ACM, January 2020.

25. **Mapping Entity Sets in News Archives across Time.** Yijun Duan, Adam Jatowt, Sourav S. Bhowmick, Masatoshi Yoshikawa. *Data Science and Engineering (DSE)*, 4(3), Springer-Verlag, September 2019 **(Invited, Best Papers of DASFAA 2019)**.

26. **On-Demand Recent Personal Tweets Summarization on Mobile Devices.** Jin Yao Chin, Sourav S Bhowmick, Adam Jatowt. *Journal of the Association for Information Science and Technology (JASIST)*, 70(6), Wiley-Blackwell Publisher, June 2019.

27. **DANTE: Data and Information Management Research at Nanyang Technological University.** Sourav S Bhowmick, Xiaokui Xiao. *SIGMOD Record*, 47(2), ACM Press, June 2018 **(Invited)**.

28. **TROVE: A User-friendly Tool for Visualizing and Analyzing Cancer Hallmarks in Signaling Networks.** Huey Eng Chua, Sourav S Bhowmick, Jie Zheng. *Bioinformatics*, 34(2), Oxford Univ Press, January 2018.

29. **Synergistic Target Combination Prediction From Curated Signaling Networks: Machine Learning Meets Systems Biology and Pharmacology.** Huey Eng Chua, Sourav S Bhowmick, Lisa Tucker-Kellogg. *Methods*, 129, Elsevier Science, 2017 **(Invited)**.

30. **VISUAL: Simulation of Visual Subgraph Query Formulation To Enable Automated Performance Benchmarking.** Sourav S Bhowmick, Huey Eng Chua, Byron Choi, Curtis Dyreson. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 29(8), 1765–1778, IEEE CS, August 2017.

31. **AutoG: A Visual Query Autocompletion Framework for Graph Databases.** Peipei Yi, Byron Choi, Sourav S Bhowmick, Jianliang Xu. *The VLDB Journal*, 26(3), 347-372, Springer-Verlag, June 2017.

32. **PANDA: Towards Partial Topology-based Search on Large Networks in a Single Machine.** Miao Xie, Sourav S Bhowmick, Gao Cong, Qing Wang. *The VLDB Journal*, 26(2), 203-228, Springer-Verlag, April 2017.

33. **PINOCCHIO: Probabilistic Influence-based Location Selection over Moving Objects.** Meng Wang, Hui Li, Jiangtao Cui, Ke Deng, Sourav S Bhowmick, Zhenhua Dong. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 28(11), 3068-3082, IEEE CS, November 2016.

34. **The Past is Not a Foreign Country: Detecting Semantically Similar Terms across Time.** Yating Zhang, Adam Jatowt, Sourav S Bhowmick, Katsumi Tanaka. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 28(10), 2793-2807, IEEE CS, October 2016.

35. **Clustering and Summarizing Protein-Protein Interaction Networks: A Survey.** Sourav S Bhowmick, Boon Siew Seah. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 28(3), 638-658, IEEE CS, March 2016.

36. **TENET: Topological Feature-based Target Characterization in Signaling Networks.** Huey Eng Chua, Sourav S Bhowmick, Lisa Tucker-Kellogg, C F Dewey, Jr. *Bioinformatics*, 31(20), 3306-3314, Oxford Univ Press, October 2015.

37. **Structure-Preserving Subgraph Query Services.** Zhe Fan, Byron Choi, Qian Chen, Jianliang Xu, Haibo Hu, Sourav S Bhowmick. *IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)*, 27(8), 2275-2290, IEEE CS, August 2015.

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55. **PANDA: A System for Partial Topology-based Search on Large Networks.** Miao Xie, Sourav S Bhowmick, Hao Su, Gao Cong, Wook-Shin Han. *In Proceedings of 44th International Conference on Very Large Data Bases (VLDB 2018)*, Rio de Janeiro, Brazil, Aug-Sept 2018 (Demo).

56. **Ranking Without Learning: Towards Historical Relevance-based Ranking of Social Images.** Min Min Chew, Sourav S Bhowmick, Adam Jatowt. *In Proceedings of 41st international ACM SIGIR conference on Research and Development in Information Retrieval (ACM SIGIR 2018)*, Ann Arbor, USA, July 2018 (`Acceptance rate:  30%`).

57. **Killing Two Birds With One Stone: Concurrent Ranking of Tags and Comments of Social Images.** Boon Siew Seah, Aixin Sun, Sourav S Bhowmick. *In Proceedings of 41st international ACM SIGIR conference on Research and Development in Information Retrieval (ACM SIGIR 2018)*, Ann Arbor, USA, July 2018 (`Acceptance rate:  30%`).

58. **BOOMER: Blending Visual Formulation and Processing of p-Homomorphic Queries on Large Networks.** Yinglong Song, Huey Eng Chua, Sourav S Bhowmick, Byron Choi, Shuigeng Zhou. *In Proceedings of 44th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2018)*, ACM Press, Houston, USA, June 2018 (`Acceptance rate:  20%`).

59. **PISTIS: A Conflict of Interest Declaration and Detection System for Peer Review Management.** Siyuan Wu, Leong Hou U, Sourav S Bhowmick, Wolfgang Gatterbauer. *In Proceedings of 44th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2018)*, ACM Press, Houston, USA, June 2018 (Demo).

60. **SURGE: Continuous Detection of Bursty Regions Over a Stream of Spatial Objects.** Kaiyu Feng, Tao Guo, Gao Cong, Sourav S Bhowmick, Shuai Ma. *In the Proceedings of the 34th IEEE International Conference on Data Engineering (ICDE 2018)*, IEEE CS, Paris, France, April 2018.

61. **Conflict of Interest Declaration and Detection System in Heterogeneous Networks.** Siyuan Wu, Leong Hou U, Sourav S Bhowmick, Wolfgang Gatterbauer. *In Proceedings of the 26th ACM International Conference on Information and Knowledge Management (ACM CIKM 2017)*, ACM Press, Singapore, Nov 2017. (`Acceptance rate: 30%`)

62. **PICASSO: Exploratory Search of Connected Subgraph Substructures in Graph Databases.** Kai Huang, Sourav S Bhowmick, Shuigeng Zhou, Byron Choi. *In Proceedings of 43rd International Conference on Very Large Data Bases (VLDB 2017)*, Munich, Germany, Aug-Sept 2017 (Demo).

63. **Summarizing Static and Dynamic Big Graphs.** Arijit Khan, Sourav S Bhowmick, Francesco Bonchi. *In Proceedings of 43rd International Conference on Very Large Data Bases (VLDB 2017)*, Munich, Germany, Aug-Sept 2017 (Tutorial).

64. **TINTIN: Exploiting Target Features for Signaling Network Similarity Computation and Ranking.** Huey-Eng Chua, Sourav S Bhowmick, L Tucker-Kellogg. *In Proceedings of 8th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB 2017)*, ACM Press, Boston, USA, August 2017.

65. **TOTEM: Personal Tweets Summarization on Mobile Devices.** Jin Yao Chin, Sourav S Bhowmick, Adam Jatowt. *In Proceedings of 40th international ACM SIGIR conference on Research and Development in Information Retrieval (ACM SIGIR 2017)*, Tokyo, Japan, Aug 2017 (Demo).

66. **ASTERIX: Ambiguity and Missing Element-Aware XML Keyword Search Engine.** Ba Quan Truong, Sourav S Bhowmick, Curtis Dyreson, Hong Jing Khok. *In Proceedings of 40th international ACM SIGIR conference on Research and Development in Information Retrieval (ACM SIGIR 2017)*, Tokyo, Japan, Aug 2017 (Demo).

67. **Plug-and-Play Queries for Temporal Data Sockets.** Curtis Dyreson, Sourav S Bhowmick. *In Proceedings of the 12th International Conference on Flexible Query Answering Systems (FQAS 2017)*, June 2017.

68. **Graph Querying Meets HCI: State of the Art and Future Directions.** Sourav S Bhowmick, Byron Choi, Chengkai Li. *In Proceedings of 43rd ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2017)*, ACM Press, Chicago, USA, May 2017 (Tutorial).

69. **FacetsViewer: A Tool for Multi-faceted Decomposition of Complex Networks.** Boon Siew Seah, Sourav S Bhowmick, Huey-Eng Chua, Mengxuan Chen, C Forbes Dewey, Jr. *In Proceedings of 16th IEEE International Conference on Data Mining (IEEE ICDM 2016)*, IEEE CS, Barcelona, Spain, December 2016 (Demo).

70. **TENET: A Machine Learning-based System for Target Characterization in Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, Lisa Tucker-Kellogg, C Forbes Dewey, Jr. *In Proceedings of 16th IEEE International Conference on Data Mining (IEEE ICDM 2016)*, IEEE CS, Barcelona, Spain, December 2016 (Demo).

71. **TAPESTRY: Network-centric Target Prioritization in Disease-related Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, Zheng Jie, L Tucker-Kellogg. *In Proceedings of 7th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB 2016)*, ACM Press, Seattle, USA, October 2016.

72. **Predictive Modeling of Drug Effects on Signaling Pathways in Diverse Cancer Cell Lines.** Shital K Mishra, Sourav S Bhowmick, Huey-Eng Chua, Zheng Jie. *In Proceedings of 7th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB 2016)*, ACM Press, Seattle, USA, October 2016.

73. **Data-driven Visual Graph Query Interface Construction and Maintenance: Challenges and Opportunities.** Sourav S Bhowmick, Byron Choi, Curtis Dyreson. *In Proceedings of 42nd International Conference on Very Large Data Bases (VLDB 2016)*, 9(12), New Delhi, India, September 2016 (`Acceptance rate: 16%`).

74. **AutoG: A Visual Query Autocompletion Framework for Graph Databases.** Peipei Yi, Byron Choi, Sourav S Bhowmick, Jianliang Xu. *In Proceedings of 42nd International Conference on Very Large Data Bases (VLDB 2016)*, 9(13), New Delhi, India, September 2016 (Demo paper) (`Acceptance rate: 37/103`).

75. **DualSim: Parallel Subgraph Enumeration in a Massive Graph on a Single Machine.** Hyeonji Kim, JuneYoung Lee, Sourav S Bhowmick, Wook-Shin Han, Jeong Hoon Lee, Seongyun Ko, Moath Jarrah. *In Proceedings of 42nd ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2016)*, ACM Press, San Francisco, USA, June-July 2016 (`Acceptance rate: 20%`).

76. **Towards Best Region Search for Data Exploration.** Kaiyu Feng, Gao Cong, Sourav S Bhowmick, Wen-Chih Peng, Chunyan Miao. *In Proceedings of 42nd ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2016)*, ACM Press, San Francisco, USA, June-July 2016 (`Acceptance rate: 20%`).

77. **Interruption-Sensitive Empty Result Feedback: Rethinking the Visual Query Feedback Paradigm for Semistructured Data.** Sourav S Bhowmick, Curtis Dyreson, Byron Choi, Min-Hwee Ang. *In Proceedings of the 24th ACM International Conference on Information and Knowledge Management (ACM CIKM 2015)*, ACM Press, 723-732, Melbourne, Australia, Oct 2015. (`Acceptance rate: 26%`)

78. **PRISM: Concept-preserving Summarization of Top-K Social Image Search Results.** Boon Siew Seah, Sourav S Bhowmick, Aixin Sun. *In Proceedings of 41st International Conference on Very Large Data Bases (VLDB 2015)*, 8(12): 1868-1879, Hawaii, USA, September 2015 (Demo paper) (`Acceptance rate: 49/150`).

79. **Virtual eXist-db: Liberating Hierarchical Queries from the Shackles of Access Path Dependence.** Curtis Dyreson, Sourav S Bhowmick, Ryan Grapp. *In Proceedings of 41st International Conference on Very Large Data Bases (VLDB 2015)*, 8(12): 1932-1943, Hawaii, USA, September 2015 (Demo paper).

80. ***Omnia Mutantur, Nihil Interit*: Connecting Past with Present by Finding Corresponding Terms across Time.** Yating Zhang, Adam Jatowt, Sourav S Bhowmick, Katsumi Tanaka. *In Proceedings of 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015)*, 645-655, Beijing, China, July 2015 (`Acceptance rate: 25%`).

81. GetReal**: Towards Realistic Selection of Influence Maximization Strategies in Competitive Networks.** Hui Li, Sourav S Bhowmick, Jiangtao Cui, Yunjun Gao, Jianfeng Ma. *In Proceedings of 41st ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2015)*, ACM Press, 1525-1537, Melbourne, Australia, June 2015 (`Acceptance rate: 25.6%`) [Nomination for the best paper award].

82. **Asymmetric Structure-Preserving Subgraph Queries for Large Graphs.** Zhe Fan, Byron Choi, Jianliang Xu, Sourav S Bhowmick. *In the Proceedings of the 31st IEEE International Conference on Data Engineering (ICDE 2015)*, IEEE CS, 339-350, Seoul, Korea, April 2015 (`Acceptance rate: 25.2%`).

83. **DaVinci: Data-driven Visual Interface Construction for Subgraph Search in Graph Databases.** Jinbo Zhang, Sourav S Bhowmick, Hong H. Nguyen, Byron Choi, Feida Zhu. *In the Proceedings of the 31st IEEE International Conference on Data Engineering (ICDE 2015)*, IEEE CS, 1500-1503, Seoul, Korea, April 2015 (Demo).

84. **ViSual: An HCI-inspired Simulator of Blending Visual Subgraph Query Construction and Processing.** Sourav S Bhowmick, Huey-Eng Chua, Benji Thian, Byron Choi. *In the Proceedings of the 31st IEEE International Conference on Data Engineering (ICDE 2015)*, IEEE CS, 1480-1483, Seoul, Korea, April 2015 (Demo).

85. **PIGEON: Progress Indicator for Subgraph Queries.** Xiaojing Xie, Zhe Fan, Byron Choi, Peipei Yi, Sourav S Bhowmick, Shuigeng Zhou. *In the Proceedings of the 31st IEEE International Conference on Data Engineering (ICDE 2015)*, IEEE CS, 1492-1495, Seoul, Korea, April 2015 (Demo).

86. **One Feature Doesn't Fit All: Characterizing Topological Features of Targets in Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, L Tucker-Kellogg. *In Proceedings of 5th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB 2014)*, ACM Press, 426-435, Newport Beach, California, USA, Sept 2014.

87. **DB ⋈ HCI: Towards Bridging the Chasm Between Graph Data Management and HCI.** Sourav S Bhowmick. *In Proceedings of the 25th International Conference on Database and Expert Systems Applications (DEXA 2014)*, Springer-Verlag, 1-11, Munich, Germany, Sept, 2014 **(Keynote)**.

88. **PRISM: Concept-preserving Social Image Search Results Summarization.** Boon-Siew Seah, Sourav S Bhowmick, Aixin Sun. *In Proceedings of 37th international ACM SIGIR conference on Research and Development in Information Retrieval (ACM SIGIR 2014)*, 737-746, Gold Coast, Australia, July 2014 (`Acceptance rate: 21%`).

89. **Querying Virtual Hierarchies using Virtual Prefix-Based Numbers.** Curtis Dyreson, Sourav S Bhowmick, Ryan Grapp. *In Proceedings of 40th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2014)*, ACM Press, 791-802, Snowbird, Utah, USA, 2014 (`Acceptance rate: 25%`).

90. **In Search of Influential Event Organizers in Online Social Networks.** Kaiyu Feng, Gao Cong, Sourav S Bhowmick, Shuai Ma. *In Proceedings of 40th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2014)*, 63-74, ACM Press, Snowbird, Utah, USA, 2014 (`Acceptance rate: 25%`).

91. **Summarizing Social Image Search Results.** Boon-Siew Seah, Sourav S Bhowmick, Aixin Sun. *In Proceedings of 23rd ACM International World Wide Web Conference (ACM WWW 2014)*, 369-370, Seoul, South Korea, 2014 (Poster) (`Acceptance rate: 91/566`).

92. **Why Not, WINE?** Sourav S Bhowmick, Aixin Sun, Ba Quan Truong. *In Proceedings of 23rd ACM International World Wide Web Conference (ACM WWW 2014)*, 83-86, Seoul, South Korea, 2014 (Demo) (`Acceptance rate: 28/84`).

93. **INGOT: Towards Network-driven In Silico Combination Therapy.** Sourav S. Bhowmick, Huey-Eng Chua, Jie Zheng. *Proceedings of the 1st International Conference on Big Data and Smart Computing (BigComp 2014)*, 34-39, Bangkok, Thailand, January 2014 **(Invited paper)**.

94. **Why Not, WINE?: Towards Answering Why-Not Questions in Social Image Search.** Sourav S Bhowmick, Aixin Sun, Ba Quan Truong. *In Proceedings of 21st ACM International Conference on Multimedia (ACM MM 2013)*, ACM Press, 917-926, Barcelona, Spain, Oct 2013 (`Acceptance rate: 20%`).

95. **MESSIAH: Missing Element-Conscious SLCA Nodes Search in XML Data.** Ba Quan Truong, Sourav S Bhowmick, Curtis Dyreson, Aixin Sun. *In Proceedings of 39th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2013)*, ACM Press, 37-48, New York City, USA, 2013 (`Acceptance rate:20%`).

96. **QUBLE: Blending Visual Subgraph Query Formulation with Query Processing on Large Networks.** Ho Hoang Hung, Sourav S Bhowmick, Ba Quan Truong, Byron Choi, Shuigeng Zhou. *In Proceedings of 39th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2013)*, ACM Press, 1097-1100, New York City, USA, 2013 (Demo).

97. **MUSTBLEND: Blending Visual Multi-Source Twig Query Formulation and Query Processing in RDBMS.** Ba Quan Truong, Sourav S Bhowmick. *In Proceedings of 18th International*

Conference on Database Systems for Advanced Applications (DASFAA 2013), Springer Verlag, 228-243, Wuhan, China, April 2013. (`Acceptance rate: < 25%`)

98. **CINEMA: Conformity-Aware Greedy Algorithm for Influence Maximization in Online Social Networks.** Hui Li, Sourav S Bhowmick, Aixin Sun. *In the Proceedings of the 16th ACM International Conference on Extending Database Technology (EDBT 2013)*, ACM Press, 323-334, Genoa, Italy, March 2013. (`Acceptance rate: 20.6%`) [One of the 12 Nominees of EDBT 2023 Test of Time (TOT) Award]

99. **VOGUE: Towards A Visual Interaction-aware Graph Query Processing Framework.** Sourav S Bhowmick, Byron Choi, Shuigeng Zhou. *In Proceedings of the 6th Biennial Conference on Innovative Data Systems Research (CIDR 2013)*, ACM Press, Asilomar, California, USA, Jan 2013.

100. **Efficient Algorithms for Generalized Subgraph Query Processing.** Wenqing Lin, Xiaokui Xiao, James Cheng, Sourav S Bhowmick. *In Proceedings of the 21st ACM International Conference on Information and Knowledge Management (ACM CIKM 2012)*, ACM Press, 325-334, Hawai, USA, Oct 2012. (`Acceptance rate: 13.4%`)

101. **STEROID: In Silico Heuristic Target Combination Identification for Disease-Related Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, L Tucker-Kellogg, C F Dewey, Jr. *In Proceedings of 3rd ACM Conference on Bioinformatics, Computational Biology and Biomedicine (ACM BCB 2012)*, ACM Press, 4-11, Orlando, Florida, USA, Oct 2012. (`Acceptance rate: 20.7%`)

102. **Content is Still King: The Effect of Neighbor Voting Schemes on Tag Relevance for Social Image Retrieval**. Ba Quan Truong, Aixin Sun, Sourav S Bhowmick. *Proceedings of 2nd ACM International Conference on Multimedia Retrieval (ACM ICMR 2012)*, ACM Press, 9, Hong Kong, China, June 2012. (`Acceptance rate 18%`) [`Oral`]

103. **CASIS: A System for Concept-Aware Social Image Search.** Ba Quan Truong, Aixin Sun, Sourav S Bhowmick. *In Proceedings of 21st ACM International Conference on World Wide Web (ACM WWW 2012)*, ACM Press, 425-428, Lyon, France, April 2012 (Demo).

104. **Stars on Steroids: Fast Evaluation of Multi-source Star Twig Queries in RDBMS.** Erwin Leonardi, Sourav S Bhowmick, Fengrong Li. *In Proceedings of 17th International Conference on Database Systems for Advanced Applications (DASFAA 2012)*, Springer Verlag, 110-125, Busan, South Korea, April 2012. (`Acceptance rate 27.6%`) [Best Papers of DASFAA 2012]

105. **SINBAD: Towards Structure-Independent Querying of Common Neighbors in XML Databases.** Ba Quan Truong, Sourav S Bhowmick, Curtis Dyreson. *In Proceedings of 17th International Conference on Database Systems for Advanced Applications (DASFAA 2012)*, Springer Verlag, 156-171, Busan, South Korea, April 2012. (`Acceptance rate 27.6%`)

106. **Querying XML Data: As You Shape It.** Curtis Dyreson, Sourav S Bhowmick. *In the Proceedings of the 28th IEEE International Conference on Data Engineering (ICDE 2012)*, IEEE CS, 642-653, Washington, USA, April 2012. (`Acceptance rate: 17.7%`)

107. **PRAGUE: Towards Blending Practical Visual Subgraph Query Formulation and Query Processing.** Changjiu Jin, Sourav S Bhowmick, Byron Choi, Shuigeng Zhou. *In the Proceedings of the 28th IEEE International Conference on Data Engineering (ICDE 2012)*, IEEE CS, 222-233, Washington, USA, April 2012. (`Acceptance rate: 17.7%`)

108. **Integrating Historical Noisy Answers For Improving Data Utility under Differential Privacy.** Shixi Chen, Shuigeng Zhou, Sourav S Bhowmick. *In the Proceedings of the 15th ACM International Conference on Extending Database Technology (EDBT 2012)*, ACM Press, 62-73, Berlin, Germany, March 2012. (`Acceptance rate: 22.5%`)

109. **In Silico Identification of Endo16 Regulators in the Sea Urchin Endomesoderm Gene Regulatory Network.** Huey-Eng Chua, Sourav S Bhowmick, Lisa Tucker-Kellogg, Qing Zhao,

C F Dewey, Jr, Hanry Yu. *In Proceedings of 2nd ACM SIGHIT International Health Informatics Symposium (IHI 2012)*, ACM Press, 131-140, Miami, USA, Jan 2012. (`Acceptance rate: 25.4%`)

110. **PANI: An Interactive Data-driven Tool for Targets Prioritization in Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, Lisa Tucker-Kellogg, Yingqi Wang, C F Dewey, Jr, Hanry Yu. *In Proceedings of 2nd ACM SIGHIT International Health Informatics Symposium (IHI 2012)*, ACM Press, 851-854, Miami, USA, Jan 2012 (Demo paper).

111. **FUSE: A System for Data-Driven Multi-Level Functional Summarization of Protein Interaction Networks.** Boon-Siew Seah, Sourav S Bhowmick, C F Dewey, Jr, Hanry Yu. *In Proceedings of 2nd ACM SIGHIT International Health Informatics Symposium (IHI 2012)*, ACM Press, 847-850, Miami, USA, Jan 2012 (Demo paper).

112. **Social Image Tag Recommendation by Concept Matchings.** Aixin Sun, Sourav S Bhowmick, Jun-An Chong. *In Proceedings of 19th ACM International Conference on Multimedia (ACM MM 2011)*, ACM Press, 1181-1184, Scottsdale, USA, Nov-Dec 2011. (Short paper)

113. **CASINO: Towards Conformity-Aware Social Influence Analysis in Online Social Networks.** Hui Li, Sourav S Bhowmick, Aixin Sun. *In Proceedings of the 20th ACM International Conference on Information and Knowledge Management (ACM CIKM 2011)*, 1007-1012, ACM Press, Glasgow, Scotland, Oct 2011 (Short paper). (`Acceptance rate: 25%`)

114. **FUSE: Towards Multi-Level Functional Summarization of Protein Interaction Networks.** Boon-Siew Seah, Sourav S Bhowmick, C F Dewey, Jr, Hanry Yu. *In Proceedings of 2nd ACM Conference on Bioinformatics, Computational Biology and Biomedicine (BCB 2011)*, 2-11, ACM Press, Chicago, USA, Aug 2011. (`Acceptance rate: 19%`) [**Best Paper Award**].

115. **PANI: A Novel Algorithm for Fast Discovery of Putative Target Nodes in Signaling Networks.** Huey-Eng Chua, Sourav S Bhowmick, Qing Zhao, L Tucker-Kellogg, C F Dewey, Jr, Hanry Yu. *In Proceedings of 2nd ACM Conference on Bioinformatics, Computational Biology and Biomedicine (BCB 2011)*, 284-288, ACM Press, Chicago, USA, Aug 2011. (Short paper)

116. **GBLENDER: Visual Subgraph Query Formulation Meets Query Processing.** Changjin Jiu, Sourav S Bhowmick, Xiaokui Xiao, Byron Choi, Shuigeng Zhou. *In Proceedings of 37th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2011)*, ACM Press, 1327-1330, Athens, Greece, 2011. (Demo paper)

117. **Optimizing Incremental Maintenance of Minimal Bisimulation of Cyclic Graphs.** Jintian Deng, Byron Choi, J. Xu, Sourav S Bhowmick. *In Proceedings of 16th International Conference on Database Systems for Advanced Applications (DASFAA 2011)*, Springer Verlag, 543-557, Hong Kong, China, April 2011. (`Acceptance rate 24%`)

118. **Efficient Evaluation of NOT-Twig Queries in Tree-Unaware Relational Databases.** Kheng-Hong Soh, Sourav S Bhowmick. *In Proceedings of 16th International Conference on Database Systems for Advanced Applications (DASFAA 2011)*, Springer Verlag, 511-527, Hong Kong, China, April 2011. (`Acceptance rate 24%`)

119. **Efficient Maintenance of Common Keys in Archives of Continuous Query Results from Deep Web Sites.** Fajar Ardian, Sourav S Bhowmick. *In the Proceedings of the 27th IEEE International Conference on Data Engineering (ICDE 2011)*, IEEE CS, 637-648, Hanover, Germany, April 2011. (`Acceptance rate 19.8%`)

120. **Affinity-Driven Prediction and Ranking of Products in Online Product Review Sites.** Hui Li, Sourav S Bhowmick, Aixin Sun. *In Proceedings of the 19th ACM International Conference on Information and Knowledge Management (ACM CIKM 2010)*, ACM Press, 1745-1748, Toronto, Canada, Oct 2010 (Short paper). (`Acceptance rate 31%`)

121. **Quantifying Tag Representativeness of Visual Content of Social Images.** Aixin Sun, Sourav S Bhowmick. *In Proceedings of 18th ACM International Conference on Multimedia (ACM MM 2010)*,

ACM Press, 471-480, Firenze, Italy, October 2010. (Acceptance rate 16%)

122. **Searching and Browsing Social Images through iAVATAR.** Aixin Sun, Sourav S Bhowmick. *ACM Multimedia Grand Challenge*, Firenze, Italy, October 2010.

123. **iAVATAR: An Interactive Tool for Finding and Visualizing Visual-Representative Tags in Image Search.** Aixin Sun, Sourav S Bhowmick, Yao Liu. *In Proceedings of 36th International Conference on Very Large Data Bases (VLDB 2010)*, 3(2): 1609-1612, Singapore, September 2010 (Demo paper). (Acceptance rate 36%)

124. **Using XMorph to Transform XML Data.** Curtis Dyreson, Sourav S Bhowmick, K Mallampalli. *In Proceedings of 36th International Conference on Very Large Data Bases (VLDB 2010)*, 3(2): 1541-1544, Singapore, September 2010 (Demo paper). (Acceptance rate 36%)

125. **GBLENDER: Towards Blending Visual Query Formulation and Query Processing in Graph Databases.** Changjin Jiu, Sourav S Bhowmick, Xiaokui Xiao, James Cheng, Byron Choi. *In Proceedings of 36th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2010)*, ACM Press, 111-122, Indianapolis, USA, 2010. (Acceptance rate 20.8%)

126. **Efficient Database-Driven Evaluation of Security Clearance for Federated Access Control of Dynamic XML Documents.** Erwin Leonardi, Sourav S Bhowmick, M Iwaihara. *In Proceedings of 15th International Conference on Database Systems for Advanced Applications (DASFAA 2010)*, Springer Verlag, 299-306, Tsukuba, Japan, April 2010. (Short Paper) (Acceptance rate 30%)

127. **BIDEL: An XML-based System for Effective Fast Change Detection of Genomic and Proteomic Data.** Yang Song, Sourav S Bhowmick. *In Proceedings of 15th International Conference on Database Systems for Advanced Applications (DASFAA 2010)*, Springer Verlag, 472-476, Tsukuba, Japan, April 2010. (Demo Paper)

128. **XMorph: A Shape-Polymorphic, Domain-Specific XML Data Transformation Language.** Curtis Dyreson, Sourav S Bhowmick, A R Jannu, K Mallampalli, S Zhang. *In the Proceedings of the 26th IEEE International Conference on Data Engineering (ICDE 2010)*, IEEE CS, 844-847, Los Angeles, USA, March 2010. (Short Paper) (Acceptance rate 20%)

129. **The Steady States and Dynamics of Urokinase Mediated Plasmin Activation.** Lakshmi Venkatraman, Hanry Yu, Sourav S Bhowmick, C F Dewey, Jr, Lisa Tucker-Kellogg. *In the Proceedings of the 15th Pacific Symposium of Biocomputing (PSB 2010)*, 190-199, Hawai, USA, Jan 2010.

130. **Blog Cascade Affinity: Analysis and Prediction.** Li Hui, Sourav S Bhowmick, Aixin Sun. *In Proceedings of the 18th ACM International Conference on Information and Knowledge Management (ACM CIKM 2009)*, ACM Press, 1117-1126, Hong Kong, China, Nov 2009. (Acceptance rate 14.5%)

131. **Towards Non-directional XPath Evaluation in a RDBMS.** Sourav S Bhowmick, Curtis Dyreson, E Leonardi, Zhifeng Ng. *In Proceedings of the 18th ACM International Conference on Information and Knowledge Management (ACM CIKM 2009)*, ACM Press, 1501-1504, Hong Kong, China, Nov 2009 (Short paper). (Acceptance rate 20.2%)

132. **NEAR-Miner: Mining Evolution Associations of Web Site Directories for Efficient Maintenance of Web Archives.** Ling Chen, Sourav S Bhowmick, W Nejdl. *In Proceedings of 35th International Conference on Very Large Data Bases (VLDB 2009)*, 2(1): 1150-1161, Lyon, France, August 2009. (Acceptance rate 17.9%)

133. **In the Search of NECTARs from Evolutionary Trees.** Ling Chen, Sourav S Bhowmick. *In Proceedings of 14th International Conference on Database Systems for Advanced Applications (DASFAA 2009)*, Springer Verlag, 714-729, Brisbane, Australia, April 2009. (Acceptance rate 21%)

134. **On the Discovery of Conserved XML Query Patterns For Evolution-Conscious Caching.** Sourav S Bhowmick. *In Proceedings of 14th International Conference on Database Systems for Advanced Applications (DASFAA 2009)*, Springer Verlag, 527-542, Brisbane, Australia, April 2009. (Acceptance rate 21%)

135. **XBLEND: Visual XML Query Formulation Meets Query Processing.** Zhou Yong, Sourav S Bhowmick, E Leonardi, K Widjanarko. *In the Proceedings of the 25th IEEE International Conference on Data Engineering (ICDE 2009)*, IEEE CS, 1535-1538, Shanghai, China, March 2009. (Demo Paper)

136. **XML Data Integration Based on Content and Structure Similarity Using Keys.** W. Viyanon, Sanjay Madria, Sourav S Bhowmick. *In the Proceedings of the 16th International Conference on Cooperative Information Systems (COOPIS 2008),* Springer Verlag, 484-493, Monterrey, Mexico, November 2008. (Acceptance rate 20%)

137. **Characterizing and Predicting Community Members from Evolutionary and Heterogeneous Networks.** Qiankun Zhao, Sourav S Bhowmick, Xin Zheng, Kai Yi. *In Proceedings of the 17th ACM International Conference on Information and Knowledge Management (ACM CIKM 2008)*, ACM Press, 309-318, Napa Valley, California, Oct 2008. (Acceptance rate 17%)

138. **Efficient Processing of High Selective XML Twig Patterns with Parent-Child Edges in a Tree-Unaware RDBMS.** Sourav S Bhowmick, Erwin Leonardi, Hongmei Sun. *In Proceedings of the 16th ACM International Conference on Information and Knowledge Management (ACM CIKM 2007)*, ACM Press, 673-682, Lisbon, Portugal, Nov 2007. (Acceptance rate 17%)

139. **Efficient Evaluation of Nearest Common Ancestor in XML Twig Queries Using Tree-Unaware RDBMS.** K G Widjanarko, Sourav S Bhowmick, Erwin Leonardi. *In Proceedings of the 18th International Conference on Database and Expert Systems Applications (DEXA 2007)*, Springer-Verlag, 617-628, Regensburg, Germany, Sept, 2007. (Acceptance rate 32%)

140. **XANADUE: A System for Detecting Changes to XML Data in Tree-Unaware Relational Databases.** Erwin Leonardi, Sourav S Bhowmick. *In Proceedings of 26th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2007)*, ACM Press, 1137-1140, Beijing, China, 2007 (Demo paper).

141. **Mirror Site Maintenance Based on Evolution Associations of Web Directories.** Ling Chen, Sourav S Bhowmick, Wolfgang Nejdl. *In Proceedings of 16th ACM International Conference on World Wide Web (WWW 2007)*, ACM Press, 1297-1298, Banff, Canada, May 2007 (Poster paper).

142. **Efficient Support of Ordered XPath Processing in Tree-Unaware Commercial Relational Databases.** Boon-Siew Seah, K G Widjanarko, Sourav S Bhowmick, Byron Choi, Erwin Leonardi. *In Proceedings of 12th International Conference on Database Systems for Advanced Applications (DASFAA 2007)*, Springer Verlag, 793-806, Bangkok, Thailand, April 2007. (Acceptance rate 18.7%)

143. **Efficient XML Query Processing in RDBMS Using GUI-Driven Prefetching in a Single-User Environment.** Sandeep Prakash, Sourav S Bhowmick, K G Widjanarko, C F Dewey, Jr. *In Proceedings of 12th International Conference on Database Systems for Advanced Applications (DASFAA 2007)*, Springer Verlag, 819-833, Bangkok, Thailand, April 2007. (Acceptance rate 18.7%)

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7. **In Silico Approach to Identify Sensitive Molecules for Use as Potential Drug Targets.** H.-Y Chua, Sourav S Bhowmick, Hanry Yu, C Forbes Dewey, Jr. *In Biomedical Engineering Society Annual Fall Meeting,* Pittsburg, Oct 2009 (Poster).

8. **Quantitative Modeling of Ischemia/Reperfusion Injury in Heart and Liver.** H.-Y Chua, Andrew Koo, Sourav S Bhowmick, Hanry Yu, C Forbes Dewey, Jr. *In Biomedical Engineering Society Annual Fall Meeting,* St Louis, Oct 2008 (Poster).

9. **A New Approach to Database Creation Using Ontologies: OWLdb.** K. R. Stiehl, K. Dang, S. Ayyadurai, B.-S Seah, Sourav S Bhowmick, C. Forbes Dewey, Jr. *In Biomedical Engineering Society Annual Fall Meeting,* Los Angeles, Sept 2007 (Poster).

10. **An Information Architecture to Support Molecular Pathway Models.** K. Dang, K. R. Stiehl, S. Ayyadurai, B.-S Seah, Sourav S Bhowmick, C. Forbes Dewey, Jr. *In Biomedical Engineering Society Annual Fall Meeting,* Los Angeles, Sept 2007 (Poster).

11. **Footprints in the Sand: Supporting External Analysis of Medical and Biological Databases.** C. Forbes Dewey, Jr., Shiva Ayyadurai, Vincent Rouilly, C L Poh, Sourav S. Bhowmick, James Evans, Richard I. Kitney. *In World Congress on Medical Physics and Biomedical Engineering (WC 2006),* Seoul, August-Sept 2006.

12. **A Publicly-Available Database for Biological Microscopy Images.** Kaori Hagihara, Katherine Yiu, Shixin Zhang, Kurt Stiehl, Sourav Bhowmick, Al Davis, James Evans, and C. Forbes Dewey, Jr. *In World Congress on Medical Physics and Biomedical Engineering (WC 2006)*, Seoul, August-Sept 2006.

Conference/Workshop Proceedings Editor

1. Sourav S. Bhowmick, Lisa Ehrlinger, Hazar Harmouch. **Proceedings of the 13th International Workshop on Quality in Databases (QDB**, VLDB Workshops, Guangzhou, China, 2024.

2. Daphne Miedema, Sourav S. Bhowmick, Michael Liut. **Proceedings of the 3rd International Workshop on Data Systems Education: Bridging Education Practice with Education Research (DataEd)**, Santiago, Chile, ACM, 2024.

3. Vikram Goyal, Naveen Kumar, Sourav S. Bhowmick, Pawan Goyal, Navneet Goyal, Dhruv Kumar: **Proceedings of the 11th International Conference on Big Data and Artificial Intelligence (BDA)**, New Delhi, India, Springer-Verlag, 2023.

4. Julia Stoyanovich, Jens Teubner, Nikos Mamoulis, Evaggelia Pitoura, Jan Mühlig, Katja Hose, Sourav S. Bhowmick, Matteo Lissandrini: **Proceedings of the 26th International Conference on Extending Database Technology (EDBT)**, Ioannina, Greece, OpenProceedings.org, 2023.

5. Gargi Dasgupta, Yogesh Simmhan, Balaji Vasan Srinivasan, Sourav Bhowmick, Amith Singhee, Maya Ramanath, Nipun Batra, Abhinandan S. Prasad (Eds): **5th Joint International Conference on Data Science & Management of Data (CODS-COMAD)**, Bangalore, India, ACM Press, 2022.

6. X. Sean Wang, Ho-Jin Choi, Junping Du, Yasushi Sakurai, Sourav S. Bhowmick, Sungju Lee (Eds.): **2018 IEEE International Conference on Big Data and Smart Computing (BigComp) Proceedings**, IEEE CS, 2018.

7. Sourav S. Bhowmick, Curtis E. Dyreson, Christian S. Jensen, Mong Li Lee, Agus Muliantara, Bernhard Thalheim (Eds.): **Database Systems for Advanced Applications, 19th International Conference Proceedings**, Springer LNCS 8421-8422, 2014.

8. Sourav S. Bhowmick, Josef Küng, Roland Wagner (Eds.): **Database and Expert Systems Applications, 20th International Conference, DEXA 2009**, Linz, Austria, August 31 - September 4, 2009. Proceedings. Lecture Notes in Computer Science 5690, Springer 2009, ISBN 978-3-642-03572-2

9. Sourav S. Bhowmick, Josef Küng, Roland Wagner (Eds.): **Database and Expert Systems Applications, 19th International Conference, DEXA 2008**, Turin, Italy, September 1-5, 2008. Proceedings. Lecture Notes in Computer Science 5181, Springer 2008, ISBN 978-3-540-85653-5.

Software Prototypes Demonstrated in Peer-Reviewed Conferences

1.	**SIERRA** *A system for counterfactual thinking-based visual property graph query construction.*	SIGMOD 2024
2.	**ARENA** *A system for retrieval and exploration of alternative query plans.*	SIGMOD 2023
3.	**VOYAGER** *A tool for computing aesthetics of a graph query interface.*	EDBT 2023

26.	**DaVinci** *A tool to realize the paradigm of data-driven visual subgraph query interface construction.*	ICDE *2015*
27.	**VISUAL** *An HCI-inspired visual subgraph query construction simulator.*	ICDE *2015*
28.	**PIGEON** *A progress indicator of subgraph queries.*	ICDE *2015*
29.	**WINE** *A system for answering why-not questions for social image retrieval.*	WWW *2014*
30.	**QUBLE** *A visual subgraph query blender for large networks.*	SIGMOD *2013*
31.	**CASIS** *A concept-based social image retrieval system.*	WWW *2012*
32.	**FUSE** *A system for summarize protein-protein interaction networks.*	SIGHIT *2012*
33.	**GBlender** *A visual subgraph querying system that blends query formulation and query processing.*	SIGMOD *2011*
34.	**iAVATAR** *A system to understand and visualize relationships of tags in social images.*	VLDB *2010*
35.	**XMorph** *An XML data transformation system.*	VLDB *2010*
36.	**XBLEND** *A visual XML querying system that blends query formulation and query processing.*	ICDE *2009*
37.	**XANADUE** *A scalable RDBMS-based XML change detection system.*	SIGMOD *2007*
38.	**BIDEL** *A change detection and visualization system for biological data.*	DASFAA *2007*

Conference/Workshop Organization Statistics

- Number of PC Chair for conferences: 9
- Number of PC Chair for workshops: 14
- Number of SPC/AE/Meta-reviewers: 16
- Number of Track Chair: 2
- Number of Demo Chair: 1
- Number of Review Quality/Ethics Chair: 1
- Number of Panel Chair: 2
- Number of Tutorial Chair: 3
- Number of Workshop Chair: 2
- Number of Doctoral Symposium Chair: 1
- Number of Proceedings Chair: 1
- Number of Publicity Chair: 3

- Number of Local Arrangement Chair: 3

International Conference Organizer

1. **53rd ACM SIGMOD International Conference on Management of Data** Los Angeles, USA
   Program Co-Chair   *2027*

2. **52nd International Conference on Very Large Data Bases (VLDB)** Boston, USA
   Associate Editor   *2026*

3. **52nd ACM SIGMOD International Conference on Management of Data** Bangalore, India
   Member of Submission and Review Ethics Committee   *2026*

4. **29th International Conference on Extending Database Technology** Tampere, Finland
   Review Quality & Ethics Chair   *2026*

5. **51st International Conference on Very Large Data Bases (VLDB)** London, United Kingdom
   Demo Co-chair   *2025*

6. **28th International Conference on Extending Database Technology** Barcelona, Spain
   Senior PC   *2025*

7. **ACM India Joint Int. Conf. on Data Science & Management of Data** Jodhpur, India
   Senior PC   *Dec 2024*

8. **29th Int. Conf. on Database Systems for Advanced Applications (DASFAA)** Gifu, Japan
   Panel Co-chair   *2024*

9. **ACM India Joint Int. Conf. on Data Science & Management of Data** Bangalore, India
   Senior PC   *Jan 2024*

10. **11th Int. Conference on Big Data and Artificial Intelligence (BDA)** New Delhi, India
    Program Co-Chair   *2023*

11. **IEEE 39th International Conference on Data Engineering (ICDE)** Anaheim, USA
    Senior PC (I&A Track)   *2023*

12. **26th International Conference on Extending Database Technology** Ioannina, Greece
    Program Co-Chair   *2023*

13. **49th ACM SIGMOD International Conference on Management of Data** Seattle, USA
    Associate Editor   *2023*

14. **31st ACM Int. Conference on Information & Knowledge Management (CIKM)** Atlanta, USA
    Senior PC   *2022*

15. **48th International Conference on Very Large Data Bases (VLDB)** Sydney, Australia
    Associate Editor   *2022*

16. **IEEE 38th International Conference on Data Engineering (ICDE)** Kuala Lumpur, Malaysia
    Associate Chair (Area Chair)   *2022*

17. **27th Int. Conf. on Database Systems for Advanced Applications (DASFAA)** Hyderabad, India
    Senior PC   *2022*

18. **ACM India Joint Int. Conf. on Data Science & Management of Data** Banglore, India
    Program Co-Chair   *2022*

19. **47th ACM SIGMOD International Conference on Management of Data** Xi'an, China
    Associate Editor   *2021*

20. **26th Int. Conf. on Database Systems for Advanced Applications (DASFAA)** Taipei, Taiwan
    Senior PC   *2021*

21.	**IEEE 37th International Conference on Data Engineering (ICDE)** *Vice Chair (Area Chair)*	Chalia, Greece *2021*
22.	**ACM India Joint Int. Conf. on Data Science & Management of Data** *Senior PC*	Bangalore, India *2021*
23.	**29th ACM Int. Conf. on Information & Knowledge Management (CIKM)** Program Co-Chair *(Short papers)*	Galway, Ireland *2020*
24.	**45th ACM SIGMOD International Conf. on Management of Data** *Core (Group Leader)*	Amsterdam *2019*
25.	**IEEE International Congress on Big Data** *Track Co-Chair (Big Data Model and Algorithms)*	San Francisco, USA *2018*
26.	**5th IEEE Int. Conf. on Big Data and Smart Computing (BigComp)** *Program Co-Chair*	Shanghai, China *2018*
27.	**44th International Conference on Very Large Data Bases (VLDB)** *Proceedings Co-Chair*	Rio de Janeiro, Brazil *2018*
28.	**36th International Conference on Conceptual Modeling (ER)** *Doctoral Symposium Co-Chair*	Valencia, Spain *2017*
29.	**26th ACM Int. Conf. on Information & Knowledge Management (CIKM)** *Workshop Co-Chair*	Singapore *2017*
30.	**4th IEEE Int. Conf. on Big Data and Smart Computing (BigComp)** *Workshop Co-Chair*	Jeju, South Korea *2017*
31.	**APWeb-WAIM Joint Conference on Web and Big Data** *Senior PC*	Beijing, China *2017*
32.	**1st IEEE Int. Conf. on Data Sciences and Advanced Analytics (DSAA)** *Tutorial Co-Chair*	Shanghai, China *2014*
33.	**Int. Conf. on Database Systems for Advanced Applications (DASFAA)** *Program Co-Chair*	Bali, Indonesia *2014*
34.	**ACM SIGMOD International Conf. on Management of Data** *Publicity Co-Chair*	Indianapolis, USA *2010*
35.	**IEEE/WIC/ACM Int. Conf. on Web Intelligence/Intelligent Agent Tech.** *Tutorial Co-Chair*	Toronto *2010*
36.	**36th International Conference on Very Large Data Bases (VLDB)** *Local arrangement Co-Chair*	Singapore *2010*
37.	**20th Int. Conf. on Database and Expert Systems Applications (DEXA)** *Program Co-Chair*	Linz, Austria *2009*
38.	**19th Int. Conf. on Database and Expert Systems Applications (DEXA)** *Program Co-Chair*	Turin, Italy *2008*
39.	**Int. Conf. on Database Systems for Advanced Applications (DASFAA)** *Panel Co-chair*	Bangkok *2007*
40.	**Int. Conf. on Database Systems for Advanced Applications (DASFAA)** *Local arrangement Co-chair*	Singapore *2006*
41.	**Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD)** *Tutorial Co-chair*	Singapore *2006*
42.	**7th Human.Society@Internet Conference** *Publicity Chair*	Seoul, South Korea *2006*

43.	**6th Human.Society@Internet Conference**	Tokyo, Japan
	Publicity Chair	*2005*
44.	**5th Int. Conf. on Parallel & Distributed Computing, Appl. and Tech**	Singapore
	Track Chair (Distributed Database Applications and Data Mining)	*2004*
45.	**3rd Int. Conf. on Web Information Systems Engineering (WISE)**	Singapore
	Local arrangement Chair	*2002*

International Workshop Organizer

1. **14th International Workshop on Quality in Databases (QDB)** London, United Kingdom
   Program Co-Chair 2025
   - In conjunction with VLDB 2025

2. **4th ACM International Workshop on Data Systems Education** Berlin, Germany
   Program Co-Chair 2025
   - In conjunction with SIGMOD 2025

3. **13th International Workshop on Quality in Databases (QDB)** Guangzhou, China
   Program Co-Chair 2024
   - In conjunction with VLDB 2024

4. **3rd ACM International Workshop on Data Systems Education** Santiago, Chile
   Program Co-Chair 2024
   - In conjunction with SIGMOD 2024

5. **4th Int. W/S on Graph Data Management: Techniques and Appl.** Brisbane, Australia
   Program Co-Chair 2013
   - In conjunction with ICDE 2013

6. **4th Int. Workshop on on Graph Databases** Hong Kong
   Program Co-Chair 2013
   - In conjunction with DASFAA 2011

7. **3rd Int. W/S on XML Data Management Tools and Techniques** Turin, Italy
   Program Chair 2008
   - In conjunction with DEXA 2008

8. **2nd Int. W/S on XML Data Management Tools and Techniques** Regensberg, Germany
   Program Chair 2007
   - In conjunction with DEXA 2007

9. **1st Int. W/S on XML Data Management Tools and Techniques** Krakow, Poland
   Program Chair 2006
   - In conjunction with DEXA 2006

10. **3rd Int. Workshop on XML Schema and Data Management** Atlanta, USA
    Program Co-Chair 2006
    - In conjunction with ICDE 2006

11. **2nd Int. Workshop on XML Schema and Data Management** Tokyo, Japan
    Program Co-Chair 2005
    - In conjunction with ICDE 2005

12. **3rd International Workshop on Biological Data Management**   Copenhagen, Denmark
    Program Co-Chair   *2005*
    - In conjunction with DEXA 2005

13. **2nd International Workshop on Biological Data Management**   Zaragoza, Spain
    Program Chair   *2004*
    - In conjunction with DEXA 2004

14. **1st International Workshop on Biological Data Management**   Prague, Czech Republic
    Program Chair   *2003*
    - In conjunction with DEXA 2003

Program Committee Member

```
ACM SIGMOD        . . . . . . . . . . . . . . . . 2018, 2019 (Core), 2020, 2021 (AE), 2023 (AE, Demo)
VLDB      . . .   2009 - 2014, 2017, 2018, 2019 (PhD Symp), 2020, 2022 (AE), 2023, 2025, 2026 (AE)
IEEE ICDE      . . . . . . . . . . . .   2013, 2015 - 2020, 2021-2022 (Vice Chair), 2023 (SPC, I&A)
EDBT       . . . . . . . . . . . . . . . . . . . . . . . . 2013, 2016, 2018, 2020 (Demo), 2025 (SPC)
ACM SIGCSE TS   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2025
ACM SIGKDD      . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2016, 2021, 2022
IEEE ICDM   . . . . . . . . . . . . . . . . . . . . . . . . . . 2007 - 2012, 2014, 2015, 2017, 2019
ACM WWW . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2010, 2014
ACM WSDM      . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2021-2025
ACM SIGIR   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2020 - 2022, 2024
ACM CIKM   . . . . . . . . . . . . . . 2009 (Ind. Track), 2012, 2013, 2017, 2018, 2022 (SPC)
DASFAA . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2006 - 2013, 2019, 2021-2022 (SPC)
ER      . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2011, 2012, 2015 - 2022, 2024
DEXA    . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2002-2008
DAWAK   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2002-2008
ECWeb . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2002-2008
CODS-COMAD   . . . . . . . . . . . . . . . . . . . . 2004, 2006, 2010-2013, 2021 (SPC), 2024 (SPC)
BigComp . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2015 - 2017
APWeb . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2004 - 2010, 2015, 2016
WAIM    . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2006 - 2009, 2014 - 2016
WISE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2010-2013
PAKDD    . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2006, 2012
ECML/PKDD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2015
TIME . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2015, 2016
Pacific Symposium on Biocomputing   . . . . . . . . . . . . . . . . . . . . . . . . . . . .2014, 2015
APBC  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2014-2018
International Conference on Genome Informatics . . . . . . . . . . . . . . . . . . . . . . . . . . 2016
IEEE International Conference on Big Knowledge (ICBK)   . . . . . . . . . . . . . . . . . . . . 2017
IEEE International Conference on Cloud and Big Data Computing (CBDCom)   . . . . . . . 2016
International Conference on Complex Systems (CCS)  . . . . . . . . . . . . . . . . . . . . . . . 2016
ODBASE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2011-2013
International Conference on Computer Science and its Applications (CSA)   . . . . . . . . . . 2011
IEEE International Conference on Computational Science and Engineering (CSE)   . . . . . . 2011
International Conference on Social Intelligence and Technology (SOCIETY)   . . . . . . . . 2013
International XML Database Symposium (XSym)   . . . . . . . . . . . . . . . . . . . . . . 2009, 2010
IEEE Advanced Information Networking and Applications (AINA)   . . . . . . . . . . 2008 - 2011
International Conference on Web Information Systems and Technologies   . . . . . . . 2008 - 2009
IEEE International Conference on Service Systems and Service Management   . . . . . . . . 2008
International Conference on Fuzzy Systems and Knowledge Discovery   . . . . . . . . . . . . 2007
IEEE International Conference on Digital Business Ecosystems and Technologies . . . . . . . 2007
International Conference on Information Integration and Web-based Applications & Services   2011
International Conference on E-Business   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2007
IEEE Symposium of Computer-Based Medical Systems (CBMS)   . . . . . . . . . . . . . . . 2007
Information Resource Management Association (IRMA) Int. Conf.   . . . . . . . . . . . . . 2006
International Conference on Semantics   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2006
International Conference on Distributed Computing and Internet Technology   . . . . . . .2004, 2006
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International Workshops

ACM International Workshop on Data Systems Education (DataEd) 2022
ACM International Workshop on Human-In-the-Loop Data Analytics (HILDA) 2020
IEEE International Workshop on Health Data Management and Mining (with ICDE) . 2016, 2017
ACM International Workshop on Algorithms and Systems for MapReduce and Beyond 2016-2018
EDBT Summer School on Graph Data Management 2015
Int. Workshop on Graph Data Management: Techniques and Applications 2010-2013
IEEE International Workshop on Domain Driven Data Mining (with ICDM) 2010
Semantic Web Information Management Workshop (SWIM) 2009-2011, 2014
Int. Workshop on Distributed XML Processing: Theory and Practice 2009
ACM International Workshop on Data and Text Mining in Bioinformatics . . . 2008, 2015, 2016
ACM International Workshop on Information Credibility on the Web 2008, 2009, 2010
IEEE ICDM Workshop on Data Mining in Bioinformatics 2006, 2007
International Workshop on XML Research and Applications (XRA) 2006
Int. Workshop on Data Management on Global Scale Data Repositories (with DEXA) 2005, 2006
IEEE International Workshop on Private Data Management 2005-2007
International Workshop on Web Semantics (with DEXA) 2005-2011
Int. Workshop on Evolution & Change in Data Management (with ER) 2004,2006,2008,2010,2012
International Workshop on P2P Data Management, Security and Trust 2004, 2005, 2006
International Workshop on P2P Data Management, Security and Trust 2004, 2005, 2006
International Workshop on Data Mining and Text Mining for Bioinformatics 2003, 2004
International Workshop on Mobility in Databases and Distributed Systems 2002-2004
International Workshop on XML Schema and Data Management (XSDM) 2003
International Workshop on Data Semantics in Web Information Systems 2001, 2002
Int. Workshop on Data Mining and Electronic Business: Practice and Experience 2001

Journal Reviewer

- ACM Transactions on Database Systems.
- ACM Transactions on The Web.
- ACM Transactions on Intelligent Systems and Technology (TIST).
- ACM Computing Survey.
- The VLDB Journal.
- IEEE Transactions on Computers.
- IEEE Transactions on Data and Knowledge Engineering.
- IEEE Transactions on Network Science and Engineering.
- IEEE Transactions on Image Processing.
- IEEE Transactions on Human-Machine Systems.
- IEEE Transactions on Multimedia.
- IEEE Transactions on Cybernetics.
- International Journal of Human-Computer Interaction.
- Data Mining and Knowledge Discovery (DMKD) Journal.
- Information Processing & Management, Elsevier.

- Bioinformatics.
- BMC Bioinformatics.
- PLOS ONE.
- Methods, Elsevier Science.
- Journal of Ethnopharmacology, Elsevier Science.
- Phytomedicine, Elsevier Science.
- Information Systems, Elsevier Science.
- Information Sciences.
- ACM SIGKDD Explorations.
- International Journal of Cooperative Information Systems.
- Telemedicine and e-Health, American Telemedicine Association.
- Health Information Science and Systems.
- Journal of Mechanics in Medicine and Biology, Word Scientific.
- Journal of the Association for Information Science and Technology (JASIST)
- Journal of Data Semantics.
- Journal of Digital Information Management (JDIM).
- Data and Knowledge Engineering Journal, Elsevier Science.
- Journal of Systems and Software.
- Computer Methods and Programs in Biomedicine, Elsevier Science.
- Statistical Analysis and Data Mining Journal.
- Journal of Research & Practice in Information Technology, Australian Computer Society.
- Journal of Computer Science and Technology.
- International Journal of Information Technology (IJIT), Singapore Computer Society.
- World Wide Web Journal, Baltzer Science Publisher.

Grant Proposal Reviewer

Swiss National Science Foundation (Switzerland) 2024
Serrapilheira Institute (Brazil) 2022, 2023
General Research Council (Hong Kong) 2016, 2020, 2021, 2024
Czech Science Foundation (Czech Republic) 2021
National Research Foundation (Singapore) 2013
Austrian Science Fund (Austria) 2005, 2014

Panelist

1. **ACM SIGMOD**   Santiago, Chile
   New Researcher Symposium: Advice from Early Ph.D. to Early Career   June 2024

2. **ACM SIGMOD** Santiago, Chile
Global Voices in Data: Navigating Responsible Man. & Processing with Diverse Persp. June 2024

3. **ACM SIGMOD** Philadelphia, USA
Publication Culture & Review Processes in the DM Community: An Open Discussion June 2022

4. **ACM SIGMOD** Philadelphia, USA
Success and Impact Beyond Traditional Metrics June 2022

5. **25th International Conference on Extending Database Technology** Edinburgh, Scotland
Diversity and Inclusion Perspectives Around the World Apr 2022

6. **Future of Adult Learning Research Symposium (FoALR)** Singapore
Science of Adult Learning Nov 2019

7. **7th ACM Conf. on Bioinfo. Comp. Biology and Health Info. (ACM BCB)** Seattle, USA
Women in Bioinformatics Oct 2016

8. **International Conf. on Cloud Computing Research & Innovation (ICCCRI)** Singapore
Large-Scale Data Management and Analytics on Cloud Oct 2015

Session Chair

ACM SIGMOD	2018, 2019, 2021
VLDB	2010, 2017, 2018
IEEE ICDE	2011, 2015, 2019
DASFAA	2004, 2006, 2007, 2010-2014
ER	2004
DEXA	2005-2007, 2009
ACM CIKM	2003, 2015
DAWAK	2001, 2003
BigComp	2014
APWeb	2008
WAIM	2008
ADMA	2012
XSym	2010
ECDM	2004

Competitive Research Grants

Active

- **SIGMOD-VLDB Joint Grant** USD$100,000
  Principal Investigator Dec 2024- Dec 2026
  - A Tool for Data-Driven PC-Chair-in-the-Loop Formation of Program Committee.

- **AcRF Tier 1 Grant** S$153,600
  Principal Investigator Nov 2024- Oct 2026
  - Towards Theory-informed Visual Abstraction of Property Graphs.

Past

- **AcRF Tier 1 Grant** — S$100,000
  Principal Investigator — *Apr 2022-Mar 2024*
  - Towards Data-driven Disambiguation of Homonymous Names in DBLP: A 30-Year-Old Notoriously Hard Challenge.

- **AcRF Tier 2 Grant** — S$546,000
  Principal Investigator — *Jan 2020-Apr 2023*
  - Towards Hallmark-aware Data-driven Target Combination Prediction for Cancer.

- **AcRF Tier 1 Grant (Thematic)** — S$197,983
  Co-Principal Investigator — *Mar 2020-Mar 2023*
  - Understanding Functional Relationships Between Socio-affective and Neurocognitive Brain Networks in Adults with ASD and ADHD to Better Inform Learning for Learners and Educators: Towards Maximising the Adult Learning Potential.

- **AcRF Tier 1 Grant** — S$130,150
  Principal Investigator — *Nov 2018-Apr 2021*
  - NEURON: Query Optimization Meets Natural Language Processing for Enhancing Learning of Database Technology.

- **Hong Kong Research Grants Council, General Research Fund** — HK$675,647
  Co-Investigator — *Jan 2017-Dec 2019*
  - Privacy-preserving Linear Algebra for Graph Query Algorithms for Massive Networks.

- **AcRF Tier 2 Grant** — S$483,600
  Principal Investigator — *Aug 2016-Oct 2019*
  - Algorithms and Index Structures for Realtime Dynamic Ridesharing.

- **AcRF Tier 2 Grant** — S$605,107
  Principal Investigator — *Jan 2016-Mar 2019*
  - Towards Data-driven Visual Graph Query Interface Construction and Management.

- **Hong Kong Research Grants Council, General Research Fund** — HK$695,861
  Co-Investigator — *Jan 2016-Dec 2018*
  - Exploratory Search on Graph Databases through Subgraph Query Feedback.

- **AcRF Tier 2 Grant** — S$514,665
  Collaborator — *Jan 2014-Jan 2017*
  - Computational Systems Biology of Synthetic Lethality towards New Cancer Medicine.

- **ACRF Tier 1 Complexity Grant** — S$197,000
  Principal Investigator — *Nov 2013-Dec 2016*
  - INGOT: Towards Systems Biology-driven In Silico Combination Therapy with Application to Cancer.

- **ACRF Tier 1 Grant** — S$181,300
  Principal Investigator — *Mar 2013-Jul 2016*
  - VIAGRA: Towards Visual Interaction-Aware Graph Querying Framework.

- **National Natural Science Foundation of China** — RMB 240,000
  Collaborator — *Jan 2013-Dec 2015*
  - Evolution-driven Analysis of the Correlation Between Multiple Behavioral Agents Within Online Social Networks.

- **Singapore-MIT Alliance Program (Computation & Systems Biology)**   S\$ 1,004,844
  Principal Investigator   *July 2005-July 2013*
    - Advanced Imaging Informatics Technology.

- **Research Grant Council, Hong Kong**   HKD\$ 329,952
  Collaborator   *Jan 2010-Dec 2011*
    - Optimizations for the View Update Problems with Emerging Applications.

- **ACRF Tier 1 Grant**   S\$100,000
  Co-Principal Investigator   *Jan 2010-Jan 2012*
    - Correlation Discovery in Graph Databases and Its Applications.

- **ACRF Tier 1 Grant**   S\$81,000
  Principal Investigator   *April 2008-March 2010*
    - Recursive Yet Interactive Query Evaluation for Complex-Structured Data.

- **ROAR Award**   S\$100,000
  Principal Investigator   *2006-2010*
    - Social Network Analytics.

- **University Research Grant**   S\$269,545
  Co-Principal Investigator   *2002-2005*
    - PET-DEVICE++ (Push-pull Extraction Tool for Distributed Audio Visual Content Terminal).

Graduate Students Advisor

Ph.D. Graduates

No.	Name	Year	Title	Current Employment
10	Renchi Yang	2021	*Efficient and Scalable Techniques for PageRank-based Graph Analytics*	Assistant Professor, HKBU, Hong Kong SAR
9	Xi Lin	2020	*Data-driven Travel Time and Demand Estimation of Vehicles in Smart Cities*	Research Scientist, Grab, Singapore
8	Huey Eng Chua	2015	*TRECENTO: In Silico Network-driven Identification of Target Combinations for Combination Therapy*	Product Owner, Ilumina, Singapore
7	Boon Siew Seah	2014	*Multi-resolution Functional Summarization and Alignment of Biological Network Models*	Director, Accenture, Singapore
6	Li Hui	2012	*iMASON: Towards Influence-Driven Multi-Level Analysis of Online Social Networks*	Professor, Xidian University, China
5	Lakshmi Venkatraman	2012	*Mathematical Model of Activation of Transforming Growth Factor-$\beta 1$ With Application to Liver Fibrosis*	Computational Biologist, Proteona
4	Chu Yang (Co-advisor)	2008	*Mapping, Indexing & Querying MPEG-7 Descriptors & Description Schemes*	–
3	Chen Ling	2007	*Discovering Association Rules from Structural Evolution of Tree Structured Web Data*	Professor, University of Technology, Sydney, Australia
2	Qiankun Zhao	2007	*Mining Evolution of Structure of Semi-Structured Web Data*	Chief Product Officer, Diact.com, China.
1	Erwin Leonardi	2007	*Scalable XML Change Detection Using Relational Databases*	Data Science Lead, Rio Tinto, Singapore.

Masters Graduates (By Research)

No.	Name	Year	Title	Current Employment
4	Hui Li	2022	*Social Psychology Meets Online Information Diffusion*	
3	Christina Lui	2019	*KANDINSKY: Time-based Visualization Of Online Social Comments*	Singapore Airlines
2	Sandeep Prakash	2005	*Efficient Storage and Query Processing of XML Data in Relational Database Systems*	
1	Denis Shestakov	2003	*Modeling and Querying Web Forms*	PDF, Aalto University, Finland

External Thesis Examiner

1. **Daphne Eveline Miedema**   Ph.D
Eindhoven University of Technology   2024
   - On Learning SQL: Disentangling Concepts in Data Systems Education.

2. **Glenn Steven Bevilacqua** — Ph.D
The University of British Columbia — 2022
- Efficient Computations on Uncertain Graphs By Group Testing, Streaming and Recycling.

3. **Meiying Li** — Ph.D
National University of Singapore — 2020
- Techniques for Efficient Query Reverse Engineering.

4. **Pingfu Chao** — Ph.D
The University of Queensland — 2020
- A Study on Map-Matching and Map Inference Problems.

5. **Mingchen Tan** — Ph.D
National University of Singapore — 2017
- Using the Prize-Collecting Steiner System to Dissect Genomic Regulatory Network from Heterogeneous Data.

6. **Senyang He** — M.Sc
University of Auckland — 2016
- Discovering Functional Dependencies From Possibilistic Data.

7. **Silu Wang** — M.Phil
Chinese University of Hong Kong — 2014
- Reachability, Path and Traversal Problems in Real-World Graphs.

8. **Jongkol Janruang** — Ph.D
Asian Institute of Technology — 2013
- Applying Semantic Suffix Net for Search Result Clustering.

9. **Hanbo Dai** — Ph.D
Singapore Management University — 2013
- Anomaly Detection on Social Data.

10. **Jia Zhu** — Ph.D
The University of Queensland — 2012
- Robust Name Disambiguation Framework for Large Databases.

11. **Nim Tri Hieu** — Ph.D
National University of Singapore — 2012
- Mathematical Modeling of the Akt Activation Pathway.

12. **Yuting He** — Ph.D
National University of Singapore — 2011
- Liver Fibrosis Surface Assessment Based on Non-Linear Optical Microscopy.

13. **Bavani Arunasalam** — Ph.D
The University of Sydney — 2007
- Support Free Data Mining Techniques.

14. **William Miao Shui** — Ph.D
The University of New South Wales — 2007
- On Efficient Processing of XML Data and Their Applications.

University Service

Current

Co-Chair, Data Science Undergraduate Programme Task Force . . . . Feb 2025-present
Elected Member of Senate (Committee on Research & Innovation) . . . . 2024 - present
Program Director, MSc (Data Science)   . . . . May 2022-present
Subject Area Group (SAG) Lead, Data Management and Analytics Group 2019-present
Grant Review Panel (SCSE)   . . . . Oct 2018-present

Past

SCSE Faculty Mentor . . . . Jan 2023-Dec 2024
Research Group Lead, Data Management & Analytics Group . . . . Mar 2012-Nov 2024
Faculty Search Committee Member (Economics-Data Science) . . . . 2023 - 2024
Member (Future of Adult Learning) . . . . Sep 2019-2021
Subject Area Group (SAG) Lead, Data Management and Analytics Group . . May 2011 - Nov 2017
Director, Data-Intensive Scalable Computing (DISCO) Lab . . . . Sep Oct 2006 - Aug 2012
Director, Centre for Advanced Information Systems (CAIS)   . . . . Oct 2006 - Aug 2012
Member of NTU CRP Panel for Informatics & Mathematics Discipline . . . . Apr 2013 - Mar 2015
Committee Member, NTU Research Council (NTURC) . . . . Dec 2011 - Dec 2013
Conference and Journal Ranking Committee Member . . . . Oct 2007 - Dec 2014
Faculty Search Committee Member (SCE)   . . . . Nov 2006 - May 2014
Graduate Committee (SMA CSB program) . . . . June 2005 - Oct 2009
Deputy Director, Centre for Advanced Information Systems (CAIS) . . . . . Jul 2005 - Sept 2006
Exhibition Chair of CoE Week . . . . Jul 2005 - Mar 2006
School Representative of CoE Week . . . . Aug 2002 - Mar 2005
School Coordinator of The Enterprise, Innovation & Tech. Exchange Exhibition May 2003 - Oct 2003
School Representative of Innovation in Engineering Conf. & Exhibition . . . . . Mar 2003 - Jul 2003
School Representative of SCIENCE.02   . . . . Jul 2002 - Sept 2002
School Representative of STBM 2001 . . . . Jul 2001 - Sept 2001
Judge of ACM Regional Computer Programming Contest . . . . Aug 2000 - Dec 2001

Curriculum Development

Data Science . . . . M.Sc
Data Science Track . . . . B.Engg
Network Science (CX4071) . . . . B.Engg
Big Data Management (CX4073) . . . . B.Engg
Inventions & Innovations in Computing (CZ1004) . . . . B.Engg (BRC)
Introduction to Databases (CZ2007) . . . . B.Engg
Database System Principles (CZ4031) . . . . B.Engg
Advanced Data Management (CZ4033) . . . . B.Engg
Biomedical Information Technology (SMA 5304) . . . . Ph.D (CSB)
Frontiers of Biomedical Engineering (SMA BE400) . . . . Ph.D (CSB)
Database Systems (CI6114/CI6205) . . . . M.Sc

Courses Offered

Graduate Courses

Network Science (M.Sc. (Data Science), SD6127) . . . . Class size: 24
Data Preparation (M.Sc. (Data Science), SD6104) 3-47
Data Science Thinking (M.Sc. (Data Science), SD6101) 20-49
Biomedical Information Technology (Ph.D. (Computational Systems Biology)) 12-21
Database Systems (M.Sc. (Information Systems), CI6114/CI6205) 17-50
Frontiers of Biological Engineering (Ph.D. (Computational Systems Biology), BE400) 7-20
Computer Programming Module 3 (M.Sc. (Financial Engineering), FE8703) 7-21

Undergraduate Courses

Network Science (B.Engg., CX4071) . . . . Class size: 30-68
Database System Principles (B.Engg., CX4031/SC3020) 80-393
Advanced Data Management (B.Engg., CZ4033) 50-75
Introduction to Databases (B.Engg., CX2007) 14-304
Database Systems (B.Engg., CPE303/CSC206) 3-280
Data Structures (B.Engg., SC108) 7-551