

# Anna Fariha

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## Research Interests

My research focuses on various aspects of data system democratization: *enhancing usability* of data systems for both non-experts and experts, building *recommendation systems* for various data-management tasks, and *providing explanation frameworks* to enhance data and systems understanding.

- *Recommendation*: data summarization, data wrangling.
- *Human-Centered Data Systems & Database Usability*: query by example, data evolution, data discovery, data insights, querying unstructured documents, data transformation, student understanding, LLM-assisted data workflows.
- *Causal reasoning and explanation frameworks*: automatic program repair, data debugging, visualization debugging, explaining data non-conformance, causal insights and explanations.
- *Data Quality & Responsible ML*: data constraints, data cleaning, trusted machine learning, fair machine learning.

## Education

**Doctor of Philosophy in Computer Science** 2021  
*Manning College of Information and Computer Sciences* *University of Massachusetts, Amherst, MA*

- Dissertation: Enhancing Usability and Explainability of Data Systems
- Advisor: Alexandra Meliou
- Committee members: Emery Berger, Peter Haas, Suman Nath
- CGPA: 4.00 out of 4.00

**Master of Science in Computer Science** 2020  
*Manning College of Information and Computer Sciences* *University of Massachusetts, Amherst, MA*  
- CGPA: 4.00 out of 4.00

**Master of Science in Computer Science and Engineering** 2011  
*Department of Computer Science and Engineering* *University of Dhaka, Bangladesh*  
- Thesis: A New Approach for Frequent Human Interaction Pattern Mining in Meeting Databases  
- CGPA: 4.00 out of 4.00

**Bachelor of Science in Computer Science and Engineering** 2010  
*Department of Computer Science and Engineering* *University of Dhaka, Bangladesh*  
- Thesis: An Algorithm for Graph Mining using Efficient Graph Indexing for Evolving Database  
- CGPA: 3.83 out of 4.00

## Employment History

**University of Utah** 7/2023 – present  
*Assistant Professor*  
Kahlert School of Computing  
Salt Lake City, UT, USA

**Microsoft** 6/2021 – 5/2023  
*Researcher*  
PROSE research and engineering team for AI-assisted programming  
Managers: Gustavo Soares, Sumit Gulwani  
Redmond, WA, USA

<b>Microsoft</b> <i>Research Intern</i> PROSE research and engineering team for AI-assisted programming Mentor: Ashish Tiwari Project: Conformance constraints and trusted machine learning	5/2019 – 11/2019 Bellevue, WA, USA
<b>Microsoft Research</b> <i>Research Intern</i> Data Management, Exploration and Mining (DMX) Mentor: Suman Nath Project: Adaptive interventional debugging for finding root causes of nondeterministic software bugs	5/2018 – 8/2018 Redmond, WA, USA
<b>University of Massachusetts</b> <i>Research Assistant</i> Data Systems Research for Exploration, Analytics, and Modeling (DREAM) Lab Manning College of Information and Computer Sciences Supervisor: Alexandra Meliou	9/2016 – 5/2021 Amherst, MA, USA
<b>Lalmatia Women's College</b> <i>Guest Lecturer</i> Department of Business Administration	1/2015 – 4/2015 Dhaka, Bangladesh
<b>University of Dhaka</b> <i>Lecturer</i> Department of Computer Science and Engineering	5/2014 – 8/2016 Dhaka, Bangladesh
<b>United International University</b> <i>Lecturer</i> Department of Computer Science and Engineering	5/2012 – 4/2014 Dhaka, Bangladesh
<b>University of Liberal Arts</b> <i>Competitive Programming Trainer</i> Coach for competitive programming in preparation for ACM ICPC Programming Contests	10/2011 – 1/2012 Dhaka, Bangladesh
<b>Structured Data Systems Limited</b> <i>Software Engineer</i> Android and Blackberry mobile applications	9/2011 – 5/2012 Dhaka, Bangladesh
<b>University of Asia Pacific</b> <i>Competitive Programming Trainer</i> Coach for competitive programming in preparation for ACM ICPC Programming Contests	10/2010 – 10/2010 Dhaka, Bangladesh

## Honors, Awards, & Achievements

SIGMOD Distinguished PC member	2024
SIGMOD Distinguished PC member	2023
SIGMOD Distinguished PC member	2022
SIGMOD Comprehensive Reproducibility Award	2022
VLDB Best Demonstration Runner-up Award	2020
Jim Gray Scholarship, CICS, UMass Amherst	2016
Special Achievement Award: Bangladesh ICT Journalist Forum	2012
Special Achievement Award: Bangladesh Bangladesh Women in IT	2012
University Scholarship for result in Bachelors of Science, U of Dhaka	2012
Special Achievement Award for outstanding performances in programming contests, U of Dhaka	2011
Dean's Honor Award (top 1%), Faculty of Engineering, U of Dhaka	2011
Dean's Award, Faculty of Engineering, U of Dhaka	2010
Fatema-Iqbal Trust Scholarship, U of Dhaka	2008

### Travel and Accommodation Scholarships

Invited Participant with Accommodation Support, Dagstuhl Seminar on Multimodal Data Quality, Germany	2026
Invited Participant, CRA Career Mentoring Workshop, Washington, DC	2024
Invited Participant with Accommodation Support, Logic and Algebra for Query Evaluation – Simons Institute for the Theory of Computing, Berkeley, California	2023
Invited Participant with Travel & Accommodation Support, CRA-WP Career Mentoring Workshop – Chicago, Illinois	2023
CRA-W Grad Cohort Workshop Travel and Accommodation Award, Washington DC	2017

### Programming Contests

Rank 5, ACM International Collegiate Programming Contest, Dhaka (Team: DU Resonance)	2011
Rank 1, Islamic University of Technology ICT Fest Programming Contest (Team: DU Resonance)	2011
Rank 1, Dhaka University National Collegiate Programming Contest (Team: DU Resonance)	2011
Rank 1, Dhaka University National Collegiate Programming Contest [Women] (Team: DU Felicity)	2011
Rank 2, SUST National Collegiate Programming Contest (Team: DU Resonance)	2010
Rank 6, ACM International Collegiate Programming Contest, Amritapuri (Team: DU Resonance)	2010
Rank 4, ACM International Collegiate Programming Contest, Dhaka (Team: DU Resonance)	2010
Rank 3, ACM International Collegiate Programming Contest, Dhaka (Team: DU Ouranos)	2009
Rank 515, Google Code Jam, (Individual, id: chorui12)	2009
Rank 4, AUST National Collegiate Programming Contest (Team: DU Resonance)	2009

## Grants

1. **Stena Center for Financial Technology – Intelligent Data Summary Recommendations for Fintech Data Analysis** [PI]. Total award amount: \$12,500. Award duration: Academic year: 2025–2026.
2. **One Utah Data Science Hub Seed Grant Award: Explaining Data Evolution** [PI]. Total award amount: \$50,000. Award duration: Mar 2024–Feb 2025.
3. **CIRC: ENS/Grand. NSF CNS 2346555: POWDER-ENS - Enhancing and Sustaining the POWDER Platform** [Co-PI, PI: Jacobus Van Der Merwe, other co-PIs: Aditya Bhaskara, Eric Eide]. Total award amount: \$4,999,980. Award duration: Oct 2024–Sep 2028.
4. **CRA-WP Distributed Research Experiences for Undergraduates (DREU): Summer support for two students.** Total award amount: \$14,000. Award duration: Summer 2024.
5. **USHE: Computer Science Targeted Workforce Application: Training the Next Generation of Database Engineers: Responsible, User-Centric, and Efficient Data Management** [led by Jeff Phillips]. Teaching grant for developing a new course: *Human-centered Data Management*. Academic year: 2023–2024.
6. **Microsoft Research Dissertation Grant.** Total award amount: \$25,000. Academic year 2020–2021.

## Publications

### Journal and Conference Publications

- [1] Tal Blau, Brit Youngmann, Anna Fariha, and Yuval Moskovitch. Causal Explanations for Disparate Trends: Where and Why? *SIGMOD*, 2026
- [2] Whanhee Cho and Anna Fariha. Data-Semantics-Aware Recommendation of Diverse Pivot Tables. *SIGMOD*, 2026
- [3] Zifan Liu, Shaleen Deep, Anna Fariha, Fotis Psallidas, Ashish Tiwari, and Avriila Floratou. Rapidash: Efficient Detection of Constraint Violations. *Proc. VLDB Endow.*, 17(8):2009–2021, 2024
- [4] Anjali Singh, Anna Fariha, Christopher Brooks, Gustavo Soares, Austin Z. Henley, Ashish Tiwari, Chethan M, Heeryung Choi, and Sumit Gulwani. Investigating Student Mistakes in Introductory Data Science Programming. In *SIGCSE*, pages 1258–1264. ACM, 2024

- [5] Rohan Bavishi, Harshit Joshi, José Cambronero, Anna Fariha, Sumit Gulwani, Vu Le, Ivan Radicek, and Ashish Tiwari. Neurosymbolic Repair for Low-code Formula Languages. *Proc. ACM Program. Lang.*, 6(OOPSLA2):1093–1122, 2022
- [6] Sainyam Galhotra, Anna Fariha, Raoni Lourenço, Juliana Freire, Alexandra Meliou, and Divesh Srivastava. Data-Prism: Exposing Disconnect between Data and Systems. In *SIGMOD*, pages 217–231. ACM, 2022
- [7] Maliha Tashfia Islam, Anna Fariha, Alexandra Meliou, and Babak Salimi. Through the Data Management Lens: Experimental Analysis and Evaluation of Fair Classification. In *SIGMOD*, pages 232–246. ACM, 2022
- [8] Anna Fariha, Ashish Tiwari, Arjun Radhakrishna, Sumit Gulwani, and Alexandra Meliou. Conformance Constraint Discovery: Measuring Trust in Data-Driven Systems. In *SIGMOD*, pages 499–512. ACM, 2021 ([Comprehensive Reproducibility Award](#))
- [9] Anna Fariha, Suman Nath, and Alexandra Meliou. Causality-Guided Adaptive Interventional Debugging. In *SIGMOD*, pages 431–446. ACM, 2020
- [10] Anna Fariha and Alexandra Meliou. Example-Driven Query Intent Discovery: Abductive Reasoning using Semantic Similarity. *Proc. VLDB Endow.*, 12(11):1262–1275, 2019
- [11] Anna Fariha, Chowdhury Farhan Ahmed, Carson K. Leung, Md. Samiullah, Suraiya Pervin, and Longbing Cao. A New Framework for Mining Frequent Interaction Patterns from Meeting Databases. *Eng. Appl. Artif. Intell.*, 45:103–118, 2015
- [12] Amit Mandal, Mehedi Hasan, Anna Fariha, and Chowdhury Farhan Ahmed. GSCS - Graph Stream Classification with Side Information. In *APWeb*, pages 389–400, 2015
- [13] Md. Samiullah, Chowdhury Farhan Ahmed, Anna Fariha, Md. Rafiqul Islam, and Nicolas Lachiche. Mining frequent correlated graphs with a new measure. *Expert Syst. Appl.*, 41(4):1847–1863, 2014
- [14] Shafaet Ashraf, Sheikh Muhammad Sarwar, Md. Abeed Hassan, Saifuddin Md. Tareeq, and Anna Fariha. An Efficient Method for Extracting Subtrees against Forest Query. In *IMCOM*, pages 98:1–98:7. ACM, 2015
- [15] Anna Fariha, Chowdhury Farhan Ahmed, Carson Kai-Sang Leung, S. M. Abdullah, and Longbing Cao. Mining Frequent Patterns from Human Interactions in Meetings Using Directed Acyclic Graphs. In *PAKDD*, pages 38–49, 2013
- [16] Md. Samiullah, Chowdhury Farhan Ahmed, Manziba Akanda Nishi, Anna Fariha, S. M. Abdullah, and Md. Rafiqul Islam. Correlation Mining in Graph Databases with a New Measure. In *APWeb*, pages 88–95, 2013
- [17] Shariful Islam, Anna Fariha, Chowdhury Farhan Ahmed, and Byeong-Soo Jeong. EGDIM: Evolving Graph Database Indexing Method. In *ICUIMC*, pages 56:1–56:10, 2012

## Short, Demonstration, and Workshop Papers

- [18] Bhavya Chopra, Ananya Singha, Anna Fariha, Sumit Gulwani, Chris Parnin, Ashish Tiwari, and Austin Z. Henley. Challenges in Using Conversational AI for Data Science. *HILDA@SIGMOD*, 2025
- [19] Shiyi He, Alexandra Meliou, and Anna Fariha. ChARLES: Change-Aware Recovery of Latent Evolution Semantics in Relational Data. *SIGMOD*, 2025
- [20] Ankita Sharma, Jaykumar Tandel, Xuanmao Li, Lanjun Wang, Anna Fariha, Liang Zhang, Syed Arsalan Ahmed Naqvi, Irbaz Bin Riaz, Lei Cao, and Jia Zou. DataMorpher: Automatic Data Transformation based on Large Language Models. *ICDE*, 2025
- [21] Whanhee Cho and Anna Fariha. UTOPIA: Automatic Pivot Table Assistant. *Proc. VLDB Endow.*, 2024
- [22] Bhavya Chopra, Anna Fariha, Sumit Gulwani, Austin Z. Henley, Daniel Perelman, Mohammad Raza, Sherry Shi, Danny Simmons, and Ashish Tiwari. CoWrangler: Recommender System for Data-Wrangling Scripts. In *SIGMOD*. ACM, 2023

- [23] El Kindi Rezig, Anshul Bhandari, Anna Fariha, Benjamin Price, Allan Vanterpool, Andrew Bowne, Lindsey McEvoy, and Vijay Gadepally. Examples are All You Need: Iterative Data Discovery by Example in Data Lakes. In *CIDR*, 2022
- [24] El Kindi Rezig, Anshul Bhandari, Anna Fariha, Benjamin Price, Allan Vanterpool, Vijay Gadepally, and Michael Stonebraker. DICE: Data Discovery by Example. *Proc. VLDB Endow.*, 14(12):2819–2822, 2021
- [25] Nishant Yadav, Matteo Brucato, Anna Fariha, Oscar Youngquist, Julian Killingback, Alexandra Meliou, and Peter Haas. SUBSUME: A dataset for subjective summary extraction from Wikipedia documents. In *New Frontiers in Summarization@EMNLP*, pages 131–141, 2021
- [26] Anna Fariha, Ashish Tiwari, Alexandra Meliou, Arjun Radhakrishna, and Sumit Gulwani. CoCo: Interactive Exploration of Conformance Constraints for Data Understanding and Data Cleaning. In *SIGMOD*, pages 2706–2710. ACM, 2021
- [27] Anna Fariha, Ashish Tiwari, Arjun Radhakrishna, and Sumit Gulwani. ExTuNe: Explaining Tuple Non-conformance. In *SIGMOD*, pages 2741–2744. ACM, 2020
- [28] Anna Fariha, Matteo Brucato, Peter J. Haas, and Alexandra Meliou. SuDocu: Summarizing Documents by Example. *Proc. VLDB Endow.*, 13(12):2861–2864, 2020 ([Best Demonstration Runner Up Award](#))
- [29] Anna Fariha, Sheikh Muhammad Sarwar, and Alexandra Meliou. SQuID: Semantic Similarity-Aware Query Intent Discovery. In *SIGMOD*, pages 1745–1748. ACM, 2018
- [30] Quazi Marufur Rahman, Anna Fariha, Amit Mandal, Chowdhury Farhan Ahmed, and Carson K. Leung. A Sliding Window-Based Algorithm for Detecting Leaders from Social Network Action Streams. In *IEEE/WIC/ACM WI-IAT*, pages 133–136, 2015

## PhD Thesis

- [31] Anna Fariha. *Enhancing Usability and Explainability of Data Systems*. PhD thesis, University of Massachusetts Amherst. [https://scholarworks.umass.edu/dissertations\\_2/2311/](https://scholarworks.umass.edu/dissertations_2/2311/)

## Software, Educational Content, and Patents

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- SAGE: Data-Semantics-Aware Recommendation of Diverse Pivot Tables. [Link](#)
- ChARLES: Change-Aware Recovery of Latent Evolution Semantics in Relational Data. [Link](#)
- ExDis: Explaining Disparate Trends. [Link](#)
- UTOPIA: Automatic Pivot Table Assistant. [Link](#)
- SQuID: Semantic similarity-aware Query Intent Discovery. [Link](#)
- Conformance Constraints Discovery: Measuring Trust in Data-Driven Systems (Winner of the ACM SIGMOD 2022 Most Reproducible Paper Award). [Link](#)
- SubSumE Dataset for Subjective Document Summarization. [Link](#)
- A Data Management Perspective on Fair Classification: An Experimental Analysis and Evaluation. [Link](#)
- Educational video on “Research in Computer Science (Databases/Data Management Track)”. [Link](#)
- Bavishi, R. J., Cambronero Sánchez, J. P., **Fariha, A.**, Gulwani, S., Le, V. M., Radicek, I., Simmons, D. G., & Tiwari, A. (2025). Language-agnostic computer program repair engine generator (U.S. Patent No. 12,265,789). U.S. Patent and Trademark Office. [Link](#)
- Deep, S., Liu, Z., Tiwari, A., **Fariha, A.**, Floratou, A., & Pasallidas, F. (2024). System and method for fast constraint discovery on relational data (U.S. Patent Application No. 18/060,500). United States Patent and Trademark Office. [Link](#)

## Panels and Proposal Reviews

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- Panelist – Grad-CS Women Panel on “Q&A Session for Women Graduate Students in Computer Science”, KSoC, University of Utah 2025
- Reviewer – Israel Science Foundation March, 2025
- Panelist – Northwest Database Society Annual Meeting: Panel on AI and Data Management February, 2024
- Panelist – NSF Information and Intelligent Systems division (IIS) 2023

- Panelist – NSF’s CSGrad4US Panel: “What I wish I knew before I started graduate school” October, 2023
- Panelist – SIGMOD New Researcher Symposium June, 2022
- Round Table Chair – VLDB: Interactive Querying and Visualization for Large Data August, 2021

## Invited Talks

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- *Understanding Data through Change Summarization and Causal Disparity Explanations*
  - Data Science Seminar, University of Utah October, 2025
  - TDSAI Lab, Department of Computer Science, Institute of Science Tokyo May, 2025
  - Onizuka Lab, Osaka University May, 2025
  - Database Seminar, Cornell University April, 2025
- *Explaining Data Evolution*
  - DELPHI Data Science Symposium, University of Utah November, 2024
- *Recent Trends in Scalable and Human-centric Data Systems*
  - Research Challenges in Computing Seminar Series, University of Utah October, 2023
- *Through the Data Management Lens: Experimental Analysis and Evaluation of Fair Classification*
  - Bias, Ethics and Trustworthiness in Data Science and AI event, University of Utah September, 2023
- *Blame the data, not the system: how data constraints can help in trustworthy machine learning and explain causes of data-system malfunction*
  - Data Science Lecture Series, University of Utah September, 2023
  - University of Washington, Northwest Database Society November, 2021
- *Blame the data, not the system: How data profiles can help explain causes of data-system malfunction*
  - Northwest Database Society (NWDS) Annual Meeting May, 2023
- *Enhancing usability and explainability of data systems*
  - Database Seminar, University of California San Diego (virtual) April, 2023
  - Cornell University April, 2022
  - Georgia University of Technology April, 2022
  - University of California, Santa Barbara March, 2022
  - University of Minnesota (virtual) March, 2022
  - University of Waterloo (virtual) March, 2022
  - University of Utah February, 2022
  - University of Toronto (virtual) February, 2022
  - Pennsylvania State University (virtual) February, 2022
  - EPIC meeting, University of California, Berkeley (virtual) February, 2022
  - Ohio State University (virtual) January, 2022
  - CSAIL, Massachusetts Institute of Technology (virtual) October, 2021
  - Microsoft (virtual) January, 2021
  - Megagon Labs (virtual) February, 2021
  - University of Pennsylvania (virtual) February, 2021
  - DATA Lab, Northeastern University (virtual) January, 2021

## Teaching

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- **University of Utah**
  - CS 6959/3960 - Human-Centered Data Management (graduate + undergraduate) Spring 2026
  - CS 6530 - Advanced Database Systems (graduate) Fall 2025
  - CS 6959/3960 - Human-Centered Data Management (graduate + undergraduate) Spring 2025
  - CS 5353/6353 - Deep Learning (graduate + undergraduate) Fall 2024
  - CS 6959/3960 - Human-Centered Data Management (graduate + undergraduate) Spring 2024
  - CS 5353/6353 - Deep Learning (graduate + undergraduate) Fall 2023

- **University of Dhaka, Bangladesh**

– CSE 1201 - Fundamentals of Programming (undergraduate)	Spring 2014
– CSE 1211 - Fundamentals of Programming Lab (undergraduate)	Spring 2014
– CSE 1102 - Discrete Mathematics (undergraduate)	Fall 2014
– CSE 2101 - Data Structures and Algorithms (undergraduate)	Spring 2015
– CSE 2111 - Data Structures and Algorithms Lab (undergraduate)	Spring 2015
– CSE 3113 - Microprocessor and Assembly Language Lab (undergraduate)	Fall 2015
– CSE 1111 - Fundamentals of Computer and Computing Lab (undergraduate)	Fall 2015
– CSE 2112 - Object Oriented Programming Lab (undergraduate)	Spring 2016
– CSE 2212 - Design and Analysis of Algorithms Lab (undergraduate)	Spring 2016
– CSE 4111 - Artificial Intelligence Lab (undergraduate)	Spring 2016

- **United International University, Bangladesh**

- CSI 219 - Discrete Mathematics (undergraduate)
- CSI 121 - Structured Programming Language (undergraduate)
- CSI 122 - Structured Programming Language Laboratory (undergraduate)
- CSI 228 - Algorithms Laboratory (undergraduate)
- CSI 233 - Theory of Computing (undergraduate)
- CSI 341 - Artificial Intelligence (undergraduate)
- CSI 342 - Artificial Intelligence Laboratory (undergraduate)

## Student Supervision

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### PhD Advisor: Current

• Whanhee Cho	Fall 2023–present
• Anirudh Kamath	Fall 2025–present
• Shamit Fatin	Fall 2025–present
• Aritra Mazumder	Fall 2025–present

### PhD Advisor: Past

• Chetan Bajaj	Spring 2025
• Shiyi He	Fall 2023–Fall 2024

### Thesis Committee Member

• Anirudh Kamath (MS)	Spring 2025
• Kutay Eken (MS)	Spring 2026

### Masters & Undergraduate

• University of Utah	
– Kuangfei Long, Boston University	Summer 2024 – Present
– Tal Blau, Technion - Israel Institute of Technology	Spring 2024 – Present
– Shreya Raj, UMass Amherst	Summer 2024 – Fall 2024
– Vijaysurya Vempati (MS)	Fall 2024
– William Erignac	Summer 2024
– Ziming Wang	Fall 2024
– Holden Ellsworth (MS)	Summer 2024
– Bhavya Chopra, University of California, Berkeley	Summer 2024
– Yuqing Wang, University of Wisconsin-Madison (DREU by CRA, Project Report [32])	Summer 2024
– Rania Saber, University of California-Riverside (DREU by CRA, Project Report [33])	Summer 2024
– Qiaoyi Cai	Fall 2023
• University of Dhaka	

- Quazi Marufur Rahman (MS) 2015
- Amit Mandal 2015
- Mehedi Hasan 2015
- Nitish Ranjan Bhowmik 2015
- Kazi Mazbah Uddin 2015

## Mentorship

- Microsoft
  - Bhavya Chopra (Predoctoral Research Fellow) [PhD student at UC Berkeley] 2022–2023
  - Yang Shi (Research Intern) [Assistant Professor at Utah State University] 2022
  - Chethan Mahadevaswamy (Predoctoral Research Fellow) [Data Scientist at Microsoft] 2021–2022
- University of Massachusetts Amherst
  - Maliha Islam (PhD) [Now at Microsoft] 2020–2021
  - Hasnain Heickal (PhD) 2021–2022
  - Oscar Youngquist (MS) 2021–2022
  - Julian Killingback (MS) 2021
  - Kanchi Masalia (MS) 2020
  - Lucy Cousins (MS) 2019–2021
  - Genglin Liu (Undergrad) 2020
  - Armand Asnani (Undergrad) 2019–2020
  - Nischal Dave (Undergrad) 2019
  - Zoey (Jingyi) Sun (Undergrad from Smith College) 2018
  - Lauren Beryl Larson (REU) (Undergrad from Wellesley College) 2017
  - Michael Satanovsky (High-school Intern from Hopkins School) 2017

## Professional Service

### Internal Service

- Member, Course Review Sub Committee, KSoC 2025
- Faculty liaison for the Graduate Student Advisory Committee (GradSAC), KSoC 2025–present
- Member, Committee to Develop BS in Artificial Intelligence, KSoC 2025
- Member, Faculty Recruiting Committee, KSoC 2025
- Graduate Admission Committee, KSoC 2025
- Member, Research Support/Opportunities Committee, KSoC 2024–present
- Panelist, Graduate Student Mentoring Panel on “How to get a job in industry?”, KSoC 2024
- Founder and Advisor, Grad-CS Women, KSoC ([gradcswomen-utah.github.io](https://gradcswomen-utah.github.io)) 2024–2025
- Graduate Admission Committee, KSoC 2024
- Faculty Advisor, Women in Computing ([wic.utahclubs.org](https://wic.utahclubs.org)) 2023–2025
- Mentor of 1st Year PhD Student (Ishrat Jahan Eliza), KSoC 2023
- Co-founder of UtahDB Research Center ([mod.cs.utah.edu](https://mod.cs.utah.edu)) 2022–present

### External Service

#### Conference Service

- Program Committee, SIGMOD (research track) 2027
- Chair, Workshop on Human-In-the-Loop Data Analytics (HILDA), at SIGMOD ([hilda.io/2026/](https://hilda.io/2026/)) 2026
- Chair, New Researcher Symposium and Mentorship, SIGMOD 2026
- Chair, Publication and Proceedings, ICDE 2026
- Session Chair, “Data Models & Interfaces” at SIGMOD 2025
- Program Committee, SIGMOD (research track) 2026
- Chair, Data-AI Systems (DAIS) Workshop, co-located with ICDE ([dais-workshop-icde.github.io](https://dais-workshop-icde.github.io)) 2025
- Program Committee, ICDE (research track) 2025



• Program Committee, VLDB (demonstration track)	2025
• Program Committee, VLDB (research track)	2025
• Program Committee, SIGMOD (demonstration track)	2025
• Program Committee, SIGMOD (research track)	2025
• Program Committee, GUIDE-AI: SIGMOD Workshop	2024
• Program Committee, ICDE (demonstration track)	2024
• Program Committee, SIGMOD (demonstration track)	2024
• Program Committee, SIGMOD (research track)	2024
• Program Committee, ICDE (Ph.D. Symposium)	2023
• Program Committee, SIGMOD (research track)	2023
• Program Committee, VLDB (research track)	2023
• Program Committee, SIGMOD (research track)	2022
• Program Committee, VLDB (research track)	2022
• Program Committee, EDBT (demonstration track)	2022
• Program Committee, SIGMOD (research track)	2021
• Session chair, EDBT	2021
• Program Committee, EDBT (demonstration track)	2021
• Program Committee, VLDB (demonstration track)	2021

### **Other Reviewing and Community Service**

• Reviewer, Elsevier Information Systems Journal	2025
• Mentor of Xuan Luo (Simon Fraser University) at New Researcher Symposium, SIGMOD	2024
• Reviewer, the TKDE Journal	2024
• Reviewer, the VLDB Journal	2023
• Reviewer, the VLDB Journal	2021
• Reviewer, UIST	2021
• External reviewer, CHI	2021
• External reviewer, SIGMOD	2018–2020

### **Problem Setter & Judge of Competitive Programming Contests**

• State University Bangladesh Inter-University Programming Contest, Bangladesh	2015
• SAARC Programming Contest, Bangladesh University, Bangladesh	2014
• Islamic University of Technology ICT Fest, Bangladesh	2014
• SAARC Programming Contest, Bangladesh University, Bangladesh	2013
• Bangladesh Informatics Olympiad, National Round, Bangladesh	2013
• North South University Inter-University Programming Contest, Bangladesh	2013
• ACM International Collegiate Programming Contest, Dhaka, Bangladesh	2012