

Bishwamittra Ghosh

Personal Details

Contact Address: 205 Bukit Batok Street 21, #02-46, Singapore, 650205

Email: bghosh@u.nus.edu

Phone: +6585990160

Date of Birth: 28 November 1995

Website: <https://bishwamittra.github.io>

Research Interest

My research interest is in deploying machine learning in high-stake decision-making. I apply formal methods to verify and improve fairness, interpretability, and explainability in machine learning.

Education

National University of Singapore, Singapore

2018 - Present

Ph.D. candidate, School of Computing

Adviser: Dr. Kuldeep S. Meel

Bangladesh University of Engineering and Technology, Bangladesh

2013 - 2017

BSc. with Honors degree in Computer Science and Engineering

Adviser: Dr. Mohammed Eunus Ali

Publications¹

Conference Papers

6. [Algorithmic Fairness Verification with Graphical Models](#)
Bishwamittra Ghosh, Debabrota Basu, Kuldeep S. Meel
Proceedings of AAAI, 2022
5. [Justicia: A Stochastic SAT Approach to Formally Verify Fairness](#)
Bishwamittra Ghosh, Debabrota Basu, Kuldeep S. Meel
Proceedings of AAAI, 2021
4. [A MaxSAT-based Framework for Group Testing](#)
Lorenzo Ciampiconi, **Bishwamittra Ghosh**, Jonathan Scarlett, Kuldeep S. Meel
Proceedings of AAAI, 2020
3. [Classification Rules in Relaxed Logical Form](#)
Bishwamittra Ghosh, Dmitry Malioutov, Kuldeep S. Meel
Proceedings of ECAI, 2020
2. [IMLI: An Incremental Framework for MaxSAT-Based Learning of Interpretable Classification Rules](#)
Bishwamittra Ghosh, Kuldeep S. Meel
Proceedings of AIES, 2019
1. [The Flexible Socio Spatial Group Queries](#)
Bishwamittra Ghosh, Mohammed Eunus Ali, Farhana M. Choudhury, Sajid Hasan Apon, Timos Sellis, Jianxin Li
Proceedings of the VLDB Endowment (PVLDB), 2018

¹sorted by publication year

Journal Papers

2. [Efficient Learning of Interpretable Classification Rules](#)

Bishwamittra Ghosh, Dmitry Malioutov, Kuldeep S. Meel
Proceedings of JAIR, 2022

1. [Social-Spatial Group Queries with Keywords](#)

Sajid Hasan Apon, Mohammed Eunus Ali, **Bishwamittra Ghosh**, Timos Sellis
ACM Transactions on Spatial Algorithms and Systems (TSAS), 2021

Professional Experiences

Conference Talks

AAAI-2022, AAAI-2021, AAAI-2020, ECAI-2020, CP-2019, VLDB-2019, IJCAI-2019, AIES-2019

Academic Reviewer

NeurIPS-2022, 2021, AAAI-2022, AIES-2022,

Research Internship

- INRIA, Lille-Nord, France 2021
- Goldman Sachs, Singapore 2021
- Max Planck Institute For Software Systems, Kaiserslautern, Germany 2020

Graduate Assistant

School of Computing, National University of Singapore 2018 - 2021

Lecturer

Department of Computer Science and Engineering, United International University (UIU), Bangladesh 2017

Reference

Kuldeep S. Meel

Sung Kah Kay Assistant Professor
School of Computing, National University of Singapore, Singapore
Email: meel@comp.nus.edu.sg

Daniel Neider

Professor
Carl von Ossietzky Universität Oldenburg, Germany
Email: daniel.neider@uol.de

Debabrota Basu

Faculty
Scool, Inria, Lille-Nord, France
Email: debabrota.basu@inria.fr