Ph.D. Candidate, School of Computing
National University of Singapore
✉ *bghosh@u.nus.edu*
bishwamittra.github.io
dblp, scholar

Bishwamittra Ghosh

Research Interests

Fairness, interpretability, and explainability in machine learning

Formal verification of machine learning

Education

01.18–06.23 (Expected) **Ph.D. in Computer Science**, *National University of Singapore*, Singapore.
Thesis advisor: Dr. Kuldeep S. Meel

02.13–09.17 **BSc. in Computer Science and Engineering**, *Bangladesh University of Engineering and Technology*, Bangladesh.
Thesis advisor: Dr. Mohammed Eunus Ali

Publications

Conference Papers

AAAI-22 Algorithmic Fairness Verification with Graphical Models
Bishwamittra Ghosh, Debabrota Basu, Kuldeep S. Meel

AAAI-21 Justicia: A Stochastic SAT Approach to Formally Verify Fairness
Bishwamittra Ghosh, Debabrota Basu, Kuldeep S. Meel

AAAI-20 A MaxSAT-based Framework for Group Testing
Lorenzo Ciampiconi, Bishwamittra Ghosh, Jonathan Scarlett, Kuldeep S. Meel

ECAI-20 Classification Rules in Relaxed Logical Form
Bishwamittra Ghosh, Dmitry Malioutov, Kuldeep S. Meel

AIES-19 IMLI: An Incremental Framework for MaxSAT-Based Learning of Interpretable Classification Rules
Bishwamittra Ghosh, Kuldeep S. Meel

VLDB-18 The Flexible Socio Spatial Group Queries
Bishwamittra Ghosh, Mohammed Eunus Ali, Farhana M. Choudhury, Sajid Hasan Apon, Timos Sellis, Jianxin Li

Journal Papers

JAIR-22 Efficient Learning of Interpretable Classification Rules
Bishwamittra Ghosh, Dmitry Malioutov, Kuldeep S. Meel

TSAS-21 Social-Spatial Group Queries with Keywords
Sajid Hasan Apon, Mohammed Eunus Ali, Bishwamittra Ghosh, Timos Sellis

Professional Experiences

Conference Talks

AAAI-22, AAAI-21, AAAI-20, ECAI-20, CP-19, VLDB-19, IJCAI-19, AIES-19

Academic Reviewer

NeurIPS (2022, 2021), AAAI (2023, 2022), AIES (2022), TKDE (2020)

Research Intern

11.21–02.22 INRIA, Lille-Nord, France

06.21–08.21 Goldman Sachs, Singapore

03.20–06.20 Max Planck Institute For Software Systems, Kaiserslautern, Germany

Graduate Assistant

2018–2021 School of Computing, National University of Singapore

Lecturer

10.17–01.18 Department of CSE, United International University (UIU), Bangladesh

Technical Skills

Advanced Python, Solvers (SAT, MaxSAT, SSAT, SMT, ILP), LaTeX

Intermediate TensorFlow, C/C++, Java

References

- Kuldeep S. Meel
  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