

# Yeasir Rayhan

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<https://yeasirrayhanprince.github.io/>

## Education

- 2021 - 2026 (exp) Ph.D. in Computer Science  
Purdue University  
Advisor: Walid G. Aref
- 2018 B.Sc. in Computer Science & Engineering  
Bangladesh University of Engineering and Technology (BUET)  
Advisor: Tanzima Hashem  
Thesis: Efficient Scheduling of Generalized Group Trips in Road Networks

## Honors

- 2023 Travel Award, ACM SIGSPATIAL  
2019 Regional Winner (Asia), The Global Undergraduate Awards (Computer Science)

## Past Employment

- May '23 - Jun '23 Intern Database Software Engineer  
ITTIADB, Bellevue, WA
- May '21 - May '23 Research Assistant  
Purdue University. Advisor: Walid G. Aref.
- Jan '21 - Aug '21 Research Assistant  
Bangladesh University of Engineering and Technology (BUET). Advisor: Tanzima Hashem.

## Publications

- SIGSPATIAL '23 **Yeasir Rayhan** and Walid G. Aref. SIMD-ified R-tree Query Processing and Optimization. In Proceedings of the 31st ACM International Conference on Advances in Geographic Information Systems.
- EDBT '23 **Yeasir Rayhan**, Tanzima Hashem, Muhammad Aamir Cheema, Hua Lu, Mohammed Eunos Ali. An Efficient Approach for Indoor Facility Location Selection. In Proceedings of the 26th International Conference on Extending Database Technology.
- TSAS '23 **Yeasir Rayhan** and Tanzima Hashem. AIST: An Interpretable Attention-Based Deep Learning Model for Crime Prediction. In Volume 9 of ACM Transactions on Spatial Algorithms and Systems.
- TSAS '19 **Yeasir Rayhan**, Tanzima Hashem, Roksana Jahan, and Muhammad Aamir Cheema. 2019. Efficient Scheduling of Generalized Group Trips in Road Networks. In Volume 5 of ACM Transactions on Spatial Algorithms and Systems.

## Preprints

Arxiv '22 Walid G. Aref, Ahmed M. Aly, Anas Daghistani, **Yeasir Rayhan**, Jianguo Wang, Libin Zhou. ILX: Intelligent "Location+X" Data Systems.

## Teaching

Spring '24 Teaching Assistant, Purdue University  
CS348: Information Systems

Fall '23 Teaching Assistant, Purdue University  
CS448: Introduction To Relational Database Systems

Spring '22 Teaching Assistant, Purdue University  
CS 180: Problem Solving And Object-Oriented Programming

Fall '21 Teaching Assistant, Purdue University  
CS 180: Problem Solving And Object-Oriented Programming

## Grants

2020 Co-author of the proposal, Interpretable Spatio-Temporal Deep Learning Models for Safe Cities and was awarded 6000\$ grant by the ICT Division, Bangladesh

## Skills

PL C/C++, Python , Java  
ML Framework PyTorch, PyTorch Geometric