

# Yeasir Rayhan

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

## Education

- 08/2021 - 05/2026 (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

## 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.

## Preprints

- Arxiv '25 **Yeasir Rayhan** and Walid G. Aref. [Exploring Next Token Prediction For Optimizing Databases.](#)
- Arxiv '25 **Yeasir Rayhan** and Walid G. Aref. [Revisiting Page Migration for Main-Memory Database Systems.](#)
- Arxiv '24 **Yeasir Rayhan** and Walid G. Aref. [P-MOSS: Learned Scheduling For Indexes Over NUMA Servers Using Low-Level Hardware Statistics.](#)
- Arxiv '22 Walid G. Aref, Ahmed M. Aly, Anas Daghistani, **Yeasir Rayhan**, Jianguo Wang, Libin Zhou. [ILX: Intelligent "Location+X" Data Systems.](#)

## Publications

- SIGMOD '25 Libin Zhou, **Yeasir Rayhan**, Lu Xing, Walid G. Aref. [GTX: A Write-Optimized Latch-free Graph Data System with Transactional Support.](#) In ACM SIGMOD 2025.
- 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 Eunus 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.

## Honors

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

## Teaching

Fall, Spring '25      Teaching Assistant, Purdue University  
CS348: Information Systems  
Fall, 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

## Skills

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