TASFIA ZAHIN

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https://tasfiazahin.github.io/
https://github.com/TasfiaZahin

EDUCATION

The Pennsylvania State University — Pennsylvania, USA
Ph.D. Candidate, Computer Science and Engineering — 2021 - Present
- Advisor: Dr. Mingfu Shao
- Research area: Computational Biology

Bangladesh University of Engineering and Technology (BUET) — Dhaka, Bangladesh
BS.c. in Computer Science and Engineering — 2015 - 2019
- CGPA: 3.90/4.00

WORK EXPERIENCE

The Pennsylvania State University — Pennsylvania, USA
Graduate Research/Teaching Assistant — 2021 - Present

Ahsanullah University of Science and Technology (AUST) — Dhaka, Bangladesh
On study leave, Department of Computer Science and Engineering — 2019 - Present

Dhanmondi Tutorial — Dhaka, Bangladesh
Teacher — 2019

PUBLICATIONS

1. Irtesam Mahmud Khan, Xiaofei Carl Zang, Ange Teng, **Tasfia Zahin**, Mingfu Shao. Boosting Transcript Assembly via Delineating Transcript Start and End Sites. *bioRxiv*, 2025.

2. Zhezheng Song*, **Tasfia Zahin***, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. *Genome Research, 2025*.
   * Equal Contribution

3. Zhezheng Song*, **Tasfia Zahin***, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. *Proceedings of 29th International Conference on Research in Computational Molecular Biology (RECOMB 2025)*.
   * Equal Contribution

4. **Tasfia Zahin***, Md Hasin Abrar*, Mizanur Rahman Jewel, Tahrina Tasnim, Md Shamsuzzoha Bayzid, Atif Rahman. An alignment-free method for phylogeny estimation using maximum likelihood. *BMC Bioinformatics*, 2025.
   * Equal Contribution

5. **Tasfia Zahin**, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. *Genome Research, 2024*.

6. **Tasfia Zahin**, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. *Proceedings of 28th International Conference on Research in Computational Molecular Biology (RECOMB 2024)*.

TECHNICAL SKILLS

Languages: C++, C, Python, Java, MATLAB, Assembly (Intel 8086)

Scripting Languages: LaTeX, Bash

Genome Browser: Integrative Genome Browser (IGV)

Deep Learning Libraries: Keras, Pytorch

Database Language: SQL, PL/SQL

Hardware: Proteus, Atmel Studio, Arduino

ACADEMIC
EXPERIENCES

- Research and poster presenter at RECOMB 2025.
- Research presenter at RECOMB 2024.
- Sub-reviewer of *RECOMB 2025*, *RECOMB 2024*, *ISMB 2024*, *WABI 2024*, *WABI 2023*, *RECOMB 2022*, *ACM-BCB 2022*.
- Volunteer at the 2024 Workshop on Emerging Methods for Sequence Analysis (WEMSA 2024) organized by The Pennsylvania State University.
- Research presenter at the 2023 Workshop on Emerging Methods for Sequence Analysis (WEMSA 2023) organized by The Pennsylvania State University.
- Attendee of ISMB 2022 Conference at Madison, Wisconsin.
- Attendee of RECOMB 2020 Virtual Conference.
- Member of BUET CS Bioinformatics group, a platform for sharing ideas and related research topics.

OTHER
EXPERIENCES

- Member of IT support sub-committee, The 23rd International Conference on Computer and Information Technology (ICCIT) 2020, hosted by Ahsanullah University of Science and Technology (AUST).
- Member of executive committee, Ahsanullah University of Science and Technology (AUST) Robotics Club.
- Mentor of Bangladeshi Women in Computer Science and Engineering (BWCSE) Mentor-mentee program, Bangladesh University of Engineering and Technology (BUET).
- Member of Bangladeshi Women in Computer Science and Engineering (BWCSE), Bangladesh University of Engineering and Technology (BUET).
- Delegate of Bangladesh Youth Leadership Summit 2016.
- Adjudicator of BRAC Inter-University Debate Competition 2016.
- Member of Bangladesh University of Engineering and Technology (BUET) Debating Club.
- Media and Publication Secretary of English Medium Buetian's Association (EMBA), Bangladesh University of Engineering and Technology (BUET).

AWARDS
AND
HONORS

- **Winner of Huawei Seeds for the Future**, 2019, Travel Grant by Huawei Technologies.
- **Dean's List Honor**, 2015-2019, Bangladesh University of Engineering and Technology (BUET).
- **Daily Star O and A Level Award of Excellence**, 2012 and 2014, The Daily Star Newspaper, Bangladesh.

REFERENCE

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University Park, PA 16802
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