# Tasfia Zahin

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### **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. Zhezheng Song\*, Tasfia Zahin\*, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. Research in Computational Molecular Biology (RECOMB), 2025.
  - \* Equal Contribution
- 2. 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
- 3. Tasfia Zahin, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. Genome Research, 2024.
- 4. Tasfia Zahin, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. 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 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) mentormentee program
- 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, 2014, The Daily Star Newspaper, Bangladesh

## **REFERENCE**

## Dr. Mingfu Shao

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## Dr. Atif Hasan Rahman

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