# 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. Research in Computational Molecular Biology (RECOMB) 2024, Genome Research 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) Mentormentee 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**

#### Dr. Mingfu Shao

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#### Dr. Atif Hasan Rahman

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