

EDUCATION	The Pennsylvania State University <i>Ph.D. Candidate, Computer Science and Engineering</i> <ul style="list-style-type: none"> • Advisor: Dr. Mingfu Shao • Research area: My research interests are in Bioinformatics and Computational Biology. Specifically, I work with short- and long-read RNA-seq data to improve the accuracy and resolution of circular RNA assembly. 	Pennsylvania, USA Aug 2021 - Present
	Bangladesh University of Engineering and Technology (BUET) <i>BS.c. in Computer Science and Engineering</i> <ul style="list-style-type: none"> • CGPA: 3.90/4.00 	Dhaka, Bangladesh Feb 2015 - Apr 2019
WORK EXPERIENCE	The Pennsylvania State University <i>Graduate Research/Teaching Assistant</i>	Pennsylvania, USA Aug 2021 - Present
	Ahsanullah University of Science and Technology (AUST) <i>On study leave, Department of Computer Science and Engineering</i>	Dhaka, Bangladesh July 2019 - July 2021
	Dhanmondi Tutorial <i>Teacher</i>	Dhaka, Bangladesh Jan 2019 - April 2019
PUBLICATIONS	<ol style="list-style-type: none"> 1. Tasfia Zahin, Irtesam Mahmud Khan, Mingfu Shao. Accurate Reconstruction of Circular RNAs from Complex Rolling Circular Long Reads with CircPlex. <i>bioRxiv</i>, Nov 2025. https://doi.org/10.1101/2025.11.21.689841 2. Zhezheng Song*, Tasfia Zahin*, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. <i>Genome Research</i>, December 2025 35: 2714-2721. 3. Zhezheng Song*, Tasfia Zahin*, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. <i>In Proceedings of 29th International Conference on Computational Molecular Biology (RECOMB 2025)</i>. Lecture Notes in Computer Science, vol 15647, pp. 390–394. Springer, Cham, 2025. 4. Tasfia Zahin, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. <i>Genome Research</i>, September 2024 34: 1365-1370. 5. Tasfia Zahin, Qian Shi, Carl Zang, Mingfu Shao. Accurate Assembly of Circular RNAs with TERRACE. <i>In Proceedings of 28th International Conference on Computational Molecular Biology (RECOMB 2024)</i>. Lecture Notes in Computer Science, vol 14758, pp. 444–447. Springer, Cham, 2024. 6. Xiaofei Carl Zang, Tasfia Zahin, Irtesam Mahmud Khan, Qian Shi, Yi Xing, Mingfu Shao. Amaranth: Enhanced Single-Cell Transcript Assembly via Discriminative Modeling of UMI Reads and Internal Reads. <i>bioRxiv</i>, Nov 2025. https://doi.org/10.1101/2025.11.24.690228 7. Irtesam Mahmud Khan, Xiaofei Carl Zang, Ange Teng, Tasfia Zahin, Mingfu Shao. Boosting Transcript Assembly via Delineating Transcript Start and End Sites. <i>bioRxiv</i>, Oct 2025. https://doi.org/10.1101/2025.10.13.682211 8. 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. <i>BMC bioinformatics</i>, 2025 Mar 7;26(1):77. 	
ACADEMIC SERVICES	<ul style="list-style-type: none"> • Sub-reviewer of <i>ISMB 2026</i>, <i>RECOMB 2026</i>, <i>RECOMB 2025</i>, <i>WABI 2025</i>, <i>RECOMB 2024</i>, <i>ISMB 2024</i>, <i>WABI 2024</i>, <i>WABI 2023</i>, <i>RECOMB 2022</i>, <i>ACM-BCB 2022</i>. • Volunteer at the 2024 Workshop on Emerging Methods for Sequence Analysis (WEMSA 2024) organized by The Pennsylvania State University. 	

CONFERENCE PARTICIPATION	<ul style="list-style-type: none"> • Research and poster presenter at RECOMB 2025, Seoul, South Korea. • Research presenter at RECOMB 2024, Boston, Massachusetts, USA. • Research presenter at the 2023 Workshop on Emerging Methods for Sequence Analysis (WEMSA 2023) organized by The Pennsylvania State University. • Attendee of ISMB 2022, Madison, Wisconsin, USA. • Attendee of RECOMB 2020 Virtual Conference.
TEACHING EXPERIENCES	<ul style="list-style-type: none"> • Teaching assistant for CMPSC 465 Data Structures and Algorithms, Fall 2021, The Pennsylvania State University. • Teaching assistant for CMPSC 465 Data Structures and Algorithms, Fall 2024, The Pennsylvania State University. • Instructor for CSE 2186 Basic Programming Techniques, Fall 2020, Ahsanullah University of Science and Technology. • Instructor for CSE 1287 and CSE 1288 Computer Programming, CSE 2146 Introduction to Computer Systems, Spring 2020, Ahsanullah University of Science and Technology. • Instructor for CSE 3107 and CSE 3108 Microprocessors, Spring 2020, Ahsanullah University of Science and Technology. • Instructor for CSE 3107 and CSE 3108 Microprocessors, CSE 2186 Basic Programming Techniques Fall 2019, Ahsanullah University of Science and Technology. • Instructor for CSE 3107 and CSE 3108 Microprocessors, Spring 2019, Ahsanullah University of Science and Technology.
AWARDS AND HONORS	<ul style="list-style-type: none"> • 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	<p>Dr. Mingfu Shao <i>Associate Professor</i> Department of Computer Science and Engineering The Pennsylvania State University W205A Westgate Building University Park, PA 16802 Email: mxs2589@psu.edu</p> <p>Dr. Atif Hasan Rahman <i>Associate Professor</i> Department of Computer Science and Engineering Bangladesh University of Engineering and Technology (BUET) ECE Building, West Palashi, Dhaka-1000, Bangladesh Email: atif@cse.buet.ac.bd</p>