

Anwar Hossain Zahid

Ames, Iowa | +1-515-766-1601 | ahzahid@iastate.edu

[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

SUMMARY

Ph.D. candidate in Computer Science at Iowa State University, specializing in machine learning model debugging and software engineering. Published in ACM FSE 2025. 4+ years of industry experience in building scalable software and AI solutions.

ACADEMIC BACKGROUND

Ph.D. in Computer Science
Iowa State University

Spring 2023 - Present

B.Sc. in Computer Science & Engineering
Bangladesh University of Engineering & Technology

Aug 2014 - Oct 2018

RESEARCH EXPERIENCE

Differential Debugging Framework for ML Model Versions

Fall 2023 - present

Research Supervisor:

Dr. Wei Le

Department of Computer Science, Iowa State University

Floating-Point Arithmetic Across Compilers

Summer 2024 - Fall 2024

Research Supervisor:

Dr. Ignacio Laguna

Group Lead, [Parallel Systems Group](#)

Lawrence Livermore National Laboratory

[Virtual Internship System](#)

Jan 2020 - Jan 2021

Research Supervisor:

Dr. Abu Sayed Md. Latiful Hoque

Department of Computer Science and Engineering,

Bangladesh University of Engineering and Technology.

[Scene Reconstruction From Multiple Static CCTV Cameras](#)

Dec 2018 - Oct 2019

Research Supervisor:

Dr. Md. Monirul Islam

Department of Computer Science and Engineering,

Bangladesh University of Engineering and Technology.

PUBLICATIONS

1. Shaila Sharmin, Anwar Hossain Zahid, Subhankar Bhattacharjee, Chiamaka Igwilo, Miryung Kim, and Wei Le. Automatically detecting numerical instability in machine learning applications via soft assertions. *Proceedings of the ACM on Software Engineering*, 2(FSE):2806–2827, 2025
2. Anwar Hossain Zahid, Monoshi Kumar Roy, and Swarna Das. Evaluation of hate speech detection using large language models and geographical contextualization. *arXiv preprint arXiv:2502.19612*, 2025
3. Anwar Hossain Zahid, Ignacio Laguna, and Wei Le. Testing gpu numerics: Finding numerical differences between nvidia and amd gpus. *arXiv preprint arXiv:2410.09172*, 2024
4. Raihan Mia, Anwar Hossain Zahid, Bipul Chandra Dev Nath, and Abu Sayed Md Latiful Hoque. A conceptual design of virtual internship system to benchmark software development skills in a blended learning environment. In *2020 23rd International Conference on Computer and Information Technology (ICCIT)*, pages 1–6. IEEE, 2020

PROFESSIONAL EXPERIENCE

Lawrence Livermore National Laboratory <i>Computing Graduate, Summer Intern</i> <i>Parallel Systems Group</i>	May 2024 - Aug 2024
Reve Systems <i>Software Engineer, R&D (E-governance)</i>	Nov 2020 - May 2022
ERA-InfoTech <i>Software Engineer, R&D (Artificial Intelligence)</i>	Nov 2019 - Nov 2020
Walton Digi-Tech <i>Junior Software Developer, R&D (Mobile)</i>	Dec 2018 - Oct 2019

PROFESSIONAL PROJECTS

Bond Management Automation Project · <i>Description:</i> An ERP system for managing the bonds (domestic and international) of the National Board of Revenue (Govt. of the People's Republic of Bangladesh).	Sep 2021 - May 2022
Parliament Resource Planning · <i>Description:</i> An exclusive resource planning for day-to-day functional activities such as accounting, procurement, project management, risk management and compliance, and supply chain operations.	Nov 2020 - Aug 2021
Robotic Process Automation for Agent Banking · <i>Description:</i> Automatic Transaction Verification of different Exchange Houses (Transfast, Western Union etc).	May 2020 - Nov 2020
Foreign Remittance System for Bank Asia, BD · <i>Description:</i> Assembled Money Transfer Company with Core Banking System(CBS).	Apr 2020 - Nov 2020

Face Recognition based Attendance System

Jan 2020 - Mar 2020

- *Description:* Real-time Attendance System with Spoof Detection.

AVA ChatBot for Bank Asia Limited, Bangladesh

Nov 2019 - Mar 2020

- *Description:* Developed a Fin-Tech ChatBot for Bank Asia Ltd, Bangladesh with cutting-edge interactive features like Account Opening, Balance Enquiry and other e-banking facilities.

Tweaking Operating System of Walton Feature Phones

May 2019 - Jul 2019

- *Description:* Developed a Notification Feature for Walton Feature Phones.

Custom Android ROM for Walton Mobiles

Dec 2018 - Oct 2019

- *Description:* Developed custom Android ROM running on MTK6580 SoC.

TECHNICAL STRENGTHS

Computer Languages	Java, Python, JavaScript, C, C++, Oracle SQL, MySQL, Dart
Software & Tools	HTML, CSS, Network Simulator-2, CISCO Packet Tracer, Latex, MATLAB, DialogFlow, Docker
Frameworks	Spring Boot, Flask, Django, Keras, Spring MVC, Flutter, React Native, AngularJS, Node.js, vue.js, Bootstrap
Operating Systems	Linux(Ubuntu, Mint and Fedora), Windows, Android, MacOS, iOS
Hardware	ATMega 32, Arduino, Hikey960, NeonKey

VOLUNTEER EXPERIENCE

CSE Fest'18 - Technical and Cultural Festival

May 2018

Student Coordinator

Dept. of CSE, BUET

- Coordinated a 2-tier team of 40 people to successfully conduct professional competitions, exhibitions and programs.
- Successfully organized over 10 events including *Inter University Programming Contest & Hackathon* together for the first time in CSE Festival, BUET.

Student Association of Mymensingh (SAM), BUET

Aug 2017 - Dec 2018

General Secretary

- Coordinating over 200 active members, enthusiastic volunteers and Alumni for over an year with successfully organizing annual cultural events and picnic.

ACADEMIC ACHIEVEMENTS & SCHOLARSHIP

- **Honorable Mention**, Summer SLAM & Poster Symposium, 2024, Lawrence Livermore National Laboratory
- **Technical Scholarship** from BUET
- Placed in top **1%** of combined merit list in public examinations (SSC, HSC) by *Ministry of Education, Bangladesh* and qualified for **Education Board Merit scholarships**