Ph.D. Candidate in Computer Science Wayne State University Email: asifkamal@wayne.edu Website: https://asifkamalturzo.github.io Phone: (+1) 313-510-0482 Google Scholar profile

Research Interests

Empirical Software Engineering, Peer Code Review, Machine Learning, Code Review Automation, Software Security, Program Analysis, Mining Software Repositories, Natural Language Processing, Human Aspects of Software Engineering.

Education

Wayne State University, Michigan, USA

Ph.D. Candidate (5th year)

Department of Computer Science, 2019- Winter 2024 (Expected)

Current GPA: 3.98/4.0

Advisor: Dr. Amiangshu Bosu

Dissertation title: Towards improving the effectiveness of the code review process through task automation.

Wayne State University, Michigan, USA

Masters of Science

Major in Computer Science, 2019-2022

Advisor: Dr. Amiangshu Bosu

GPA: 4.0/4.0

Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

Bachelor of Science

Computer Science and Engineering, 2013-2017

GPA: 3.45/4.0

Publications

Journal Papers

*In the Software Engineering field, TSE, EMSE, and TOSEM are considered top-tier journals.

- 1. **(EMSE-24)** <u>Asif Kamal Turzo</u>, and Amiangshu Bosu, "What Makes a Code Review Useful to OpenDev Developers? An Empirical Investigation." *Empirical Software Engineering (EMSE)*, vol. TBD, 2024. **Impact Factor: 8.7**
- (TOSEM-23) Jaydeb Sarker, <u>Asif Kamal Turzo</u>, Ming Dong, and Amiangshu Bosu, "Automated Identification of Toxic Code Reviews Using ToxiCR.", ACM Transactions on Software Engineering and Methodology (TOSEM), 32(5), july 2023, Impact Factor: 4.4

3. **(EMSE-23)** Sayma Sultana, <u>Asif Kamal Turzo</u>, and Amiangshu Bosu. "Code reviews in open source projects: how do gender biases affect participation and outcomes?." *Empirical Software Engineering (EMSE)* 28, no. 4 (2023): 92, **Impact Factor: 8.7**

Conference Papers

In the Software Engineering field, ICSE, FSE, and ASE are considered top-tier (A) conferences.

- 4. **(ESEM-23)** Asif Kamal Turzo, Fahim Faysal, Ovi Poddar, Jaydeb Sarker, Anindya Iqbal, and Amiangshu Bosu. Towards automated classification of code review feedback to support analytics. In *Proceedings of the 17th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*, vol. TBD, 2023. Acceptance rate = (29%).
- 5. **(ICSE-21)** Rajshakhar Paul, <u>Asif Kamal Turzo</u>, and Amiangshu Bosu, "Why security defects go unnoticed during code reviews? a case-control study of the chromium os project. In *Proceedings of the 43th International Conference on Software Engineering (ICSE)*, page 1373-1385. IEEE, 2021. Acceptance rate = **(22%)**.
- 6. **(APSEC-20)** Jaydeb Sarker, <u>Asif Kamal Turzo</u>, and Amiangshu Bosu. A benchmark study of the contemporary toxicity detectors on software engineering interactions. In *Proceedings of the 27th Asia-Pacific Software Engineering Conference (APSEC)*, pages 218–227. IEEE, 2020. **Acceptance rate = (37%)**.

Short Papers

- (ICSE-21) Rajshakhar Paul, <u>Asif Kamal Turzo</u>, and Amiangshu Bosu, "A Dataset of Vulnerable Code Changes of the Chromium OS Project," 2021 IEEE/ACM 43rd International Conference on Software Engineering: Companion Proceedings (ICSE-Companion), 2021, pp. 244-245.
- 8. **(ASE-22)** <u>Asif Kamal Turzo</u>, "Towards Improving Code Review Effectiveness Through Task Automation." *37th IEEE/ACM International Conference on Automated Software Engineering (ASE)*, 2022 (Doctoral Symposium)

Academic Employment

Graduate Research Assistant, 2019-2022

Department of Computer Science

Wayne State University, Detroit, MI

Project: Worked on NSF grant #1850475 under the supervision of Dr. Amiangshu Bosu. The research focused on building an empirical understanding of useful code review and then utilizing the understanding to build a reviewer recommendation system for Open Source Software projects.

Graduate Teaching Assistant, 2022-Present

Department of Computer Science

Wayne State University, Detroit, MI

Teaching Experience

Course Instructor (Wayne State University, MI, USA)

— CSC 4500: Introduction to Theoretical Computer Science: Spring/Summer 2022

Teaching Assistant (Wayne State University, MI, USA)

- CSC 4420: Computer Operating Systems: Spring/Summer 2023
- CSC 5991: ST: Scalable Microservices: Spring/Summer 2023
- CSC 4996: Senior Capstone Project: Fall 2023
- CSC 4996: Senior Capstone Project: Winter 2023
- CSC 4996: Senior Capstone Project: Fall 2022

Software Industry Experience

Senior Software Developer

EnamelBD Private Limited From 11/2017 to 05/2018 Dhaka, Bangladesh

Software Developer

piSTRATEGY (Software and Consulting Company) From 2/2019 to 6/2019 Dhaka, Bangladesh

Tools and Applications

Tool Name: Code Review Comment Classification Tool [GitHub]

- A tool developed in Python for classifying code review comments.
- Can be utilized to calculate code review analytics and to understand how effectively reviewers have identified software defects.

Project Name: VAT Checker Android Application

- Has saved government from 3 billion BDT(Bangladeshi Taka) VAT fraud.
- Has generated social awareness to prevent VAT fraud and achieved a number of national and international awards.

Awards and Achievements

- Champion at mBillionth Award, 2016 (Government and Citizen Engagement sector) for VAT Checker(it is considered one of the most prestigious awards in South Asia).
- Champion at National Mobile Application Award, 2016 for VAT Checker.
- Champion at BRAC Manthan Digital Innovation Award, 2016 (E-Governance and Institutions sector) for VAT Checker.
- NSF Travel Grant for attending ESEM-2023 conference.
- SIGSOFT CAPS award for attending ESEM-2023 conference.

Academic Services

Reviewer

- Software Quality Journal: 2022-Present
- Junior PC member at Mining Software Repository (MSR) 2022 Conference

Additional Reviewer

2021 IEEE/ACM 43rd International Conference on Software Engineering: Companion Proceedings (ICSE-Companion)

Student Volunteer

- 43rd International Conference on Software Engineering (ICSE), 2021
- 37th IEEE/ACM International Conference on Automated Software Engineering (ASE), 2022

Presentations

- "Towards Improving Code Review Effectiveness Through Task Automation" at ASE-2022 Doctoral Symposium, Michigan, USA
- "Towards Automated Classification of Code Review Feedback to Support Analytics" at ESEM-2023, Louisiana, USA

Reference

- **Dr. Amiangshu Bosu**, Assistant Professor, Dept. of Computer Science, Wayne State University Email: amiangshu.bosu@wayne.edu Phone: (+1) 313-577-0731
- **Dr. Loren Schwiebert**, Professor, Dept. of Computer Science, Wayne State University Email: loren@wayne.edu
- **Dr. Foyzul Hassan**, Assistant Professor, Computer and Information Science, University of Michigan Dearborn Email: foyzul@umich.edu