Jaydeb Sarker

Ph.D. Candidate in Computer Science, Wayne State University
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Research Interest

Software Engineering, Natural Language Processing, Deep Learning, Explainable AI

Education

Wayne State University   Detroit, MI
Ph.D. Candidate in Computer Science, GPA: 3.92/4.0   *August 2019 – May 2024(Expected)*

Wayne State University   Detroit, MI
Masters in Computer Science, GPA: 3.90/4.0   *August 2019 – August 2022*

Rajshahi University of Engineering and Technology   Rajshahi, Bangladesh
BSc. in Computer Science and Engineering, CGPA: 3.71/4.0 (Position: 7th/56)   *January 2012 – October 2016*

Experiences

Thomas C Rumble Graduate Fellow   August 2022 – May 2023
Wayne State University   *Detroit, MI*
Graduate Teaching Assistant   August 2019 – August 2022
Wayne State University   *Detroit, MI*
Lecturer   January 2017 – July 2019
University of Information Technology and Sciences   *Dhaka, Bangladesh*
Internship on 5G wireless communication   Sept 2017- Nov 2017
Otto-Von-Guericke-Universität   *Magdeburg, Germany*

Publications

1. Jaydeb Sarker, Sayma Sultana, Steven Wilson, and Amiangshu Bosu. Toxispanse: An explainable toxicity detection in code review comments. In *Proceedings of the 17th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM), Accepted in Technical Track*

2. Jaydeb Sarker, Asif Kamal Turzo, Ming Dong, and Amiangshu Bosu. Automated identification of toxic code reviews using toxicr. *ACM Transactions on Software Engineering and Methodology*, feb 2023. Accepted

3. Jaydeb Sarker. 'who built this crap?' developing a software engineering domain specific toxicity detector. *Student Research Competition on the International Conference on Automated Software Engineering (ASE), Rochester, MI, USA*, pages 1–3, 2022.

4. Jaydeb Sarker. Identification and mitigation of toxic communications among open source software developers. *Doctoral Symposium on the International Conference on Automated Software Engineering (ASE), Rochester, MI, USA*, pages 1–5, 2022.

5. Sayma Sultana, Jaydeb Sarker, and Amiangshu Bosu. A rubric to identify misogynistic and sexist texts from software developer communications. In *Proceedings of the 15th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*, pages 1–6, 2021.

6. Jaydeb Sarker, Asif Kamal Turzo, and Amiangshu Bosu. A benchmark study of the contemporary toxicity detectors on software engineering interactions. In *2020 27th Asia-Pacific Software Engineering Conference (APSEC)*, pages 218–227. IEEE, 2020.

Honors and Awards

- Thomas C. Rumble University Graduate Fellowship for 2022-23 Academic Year, Wayne State University

- Deutscher Akademischer Austauschdienst (DAAD) scholarship, Germany- 2017

- Technical scholarship in RUET for the outstanding results from 2012 to 2016.

Reviewing/Professional Activities

1. Member of the program committee (Junior PC- reviewer) at the 2023 Mining Software Repositories Conference

2. Reviewer of Software Quality Journal 2022

3. Reviewer in MSR 2021 Shadow Program Committee member

4. Additional Reviewers within the ICSE 2021- Tool Demonstrations-track

Technical Skills

Skills: Analytical Problem Solving, Algorithms, Agile method in SE, Git
Languages: Java, Python , C, C++, SQL, MATLAB, HTML, CSS
Developer Tools: Jupyter Notebook, Scikit Learn, Keras, Tensorflow, Pytorch
Machine Learning: TClassification, Regression, Clustering, Deep Neural Models, BERT
Certifications: CCNA Routing and Switching

Deep Learning Tool

ToxiCR | *Python* [Github]
- A supervised learning based tool to identify toxic code review comments

Conference Volunteer Experience

1. 37th IEEE/ACM International Conference on Automated Software Engineering (ASE) 2022, Oakland Center, Michigan.

2. Worked as a Student Volunteer in the 44th ICSE-2022, In person Conference at Pittsburg, PA, USA.

3. Student Volunteer in the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE) 2021, Virtual (Original: Melbourne, Australia).

4. Worked as a Student Volunteer in the 43th ICSE-2021, Virtual Conference (Original: Madrid, Spain).

Analytical Problem Solving

- Solved 150+ problems in Leetcode, UVA and LightOj online judges.

- Participated in programming contest in "RUET CSE-2012", participated ACM-ICPC preliminary contest in Dhaka Region-2014.

Certification

CCNA Routing and Switching. The course includes Introduction to Networks, Routing and Switching Essentials, Scaling Networks and Connecting Networks.

Reference

Dr. Amiangshu Bosu,
Assistant Professor, Department of Computer Science
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