Jaydeb Sarker

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

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Website: https://jaydebsarker.github.io/

RESEARCH INTEREST

Software Engineering, Natural Language Processing, Software Developers Interactions

EDUCATION

Wayne State University

Detroit, MI

Ph.D. Candidate in Computer Science, GPA: 3.92/4.0

August 2019 - July 2024 (Expected)

Rajshahi University of Engineering and Technology

BSc. in Computer Science and Engineering, CGPA: 3.71/4.0 (Position: 7th/56)

Rajshahi, Bangladesh January 2012 – October 2016

EXPERIENCE

Graduate Teaching Assistant

August 2019 – Present

Detroit, MI

Wayne State University

• Software Engineering Lab [Winter-2021, Summer-21, Winter-22, Summer-22]

• Taught Courses: Problem Solving and Programming (Theory and Laboratory) [Fall-19, Winter-20, Summer-20, Fall-20, Summer-21]

Lecturer January 2017 – July 2019

University of Information Technology and Sciences

Dhaka, Bangladesh

- Taught undergraduate programming, data structure and Algorithms courses
- Worked as a mentor for programming contest team

Internship on 5G wireless communication

Sept 2017- Nov 2017

Otto-Von-Guericke-Universität

Magdeburg, Germany

• Goal: Beam steering from the antenna using USRPs.

Outcome: 16- QAM produced the best accuracy using OFDM (Orthogonal Frequency Division Multiplexing).

PUBLICATIONS

- 1. Jaydeb Sarker. Identification and mitigation of toxic communications among open source software developers.

 Doctoral Symposium on the International Conference on Automated Software Engineering (ASE), 2022.
- 2. Jaydeb Sarker, Asif Kamal Turzo, Ming Dong, and Amiangshu Bosu. Automated identification of toxic code reviews using toxicr. arXiv preprint arXiv:2202.13056, 2022 (Major Revision Submitted to ACM Transactions on Software Engineering and Methodology (TOSEM)).
- 3. 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.
- 4. Jaydeb Sarker, Asif K. Turzo, 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'20, page TBD, December 2020.
- 5. Jaydeb Sarker, Mustain Billah, and Md Al Mamun. Textual question answering for semantic parsing in natural language processing. In 2019 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT), pages 1–5. IEEE, 2019.

Volunteer Experience

- 1. Worked as a Student Volunteer in the 44th ICSE-2022, In person Conference at Pittsburg, PA, USA.
- 2. Student Volunteer in the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE) 2021, Virtual (Original: Melbourne, Australia).
- 3. Worked as a Student Volunteer in the 43th ICSE-2021, Virtual Conference (Original: Madrid, Spain).

REVIEWING/PROFESSIONAL ACTIVITIES

- 1. Reviewer of Software Quality Journal 2022
- 2. Reviewer in MSR 2021 Shadow Program Committee member
- 3. Additional Reviewers within the ICSE 2021- Tool Demonstrations-track
- 4. GTA Training Workshop, WSU-2021 (basic classroom management, grading, professional development)

TALKS/PRESENTATION

1. Presented paper in APSEC 2020, virtual presentation in available, Link

PROJECTS

Basic Java Instant Messenger | Java [Github]

Sep 2021 - Dec 2021

• Java application based on GUI and Sockets+Streams where multiple clients can communicate with each other. In this project, I have used the modern software development concepts (Scrum, Sprint, Unit Testing, Static Analysis, Continuous Integration, Dynamic Analysis).

Deep Pyramid LSTM Networks for Toxic Comment Classification

| Pyhton, Tensorflow [Github]

Jan 2020 – Apr 2020

• I and two of my group members developed a deep learning based model for detecting toxic contents in Software Engineering domain.

City_of_Youtube_Videos | Java EE (Servlet, jsp, apache tomcat server)

Sep 2019 - Dec 2019

• This is a graduate course project where I worked on some complex Database queries in MySQl and designed the system using Java EE (Servlet, jsp) and apache tomcat server.[Github]

Analytical Problem Solving

- Solved 150+ problems in Leetcode, UVA and LightOj online judges.
- Participated programming contest in "RUET CSE-2012", participated ACM-ICPC preliminary contest in Dhaka Region-2014.

Honors and Awards

- Deutscher Akademischer Austauschdienst (DAAD) scholarship, Germany- 2017
- Technical scholarship in RUET for outstanding result throughout 2012 to 2016

LEADERSHIPS AND EXTRA-CURRICULAR ACTIVITIES

- Coach of UITS programming contest team in National Collegiate Programming Contest (NCPC).
- Speaker of the seminar on "Higher Studies Abroad for the students of UITS" in 2018.

CERTIFICATIONS

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

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

References

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