# Jaydeb Sarker

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### Research Interest

Software Engineering, Natural Language Processing, Software Developers Interactions

#### **EDUCATION**

### Wayne State University

Detroit, MI

Ph.D. Candidate in Computer Science, GPA: 3.91/4.0

Aug. 2019 - Present

### Rajshahi University of Engineering and Technology

Rajshahi, Bangladesh

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

Jan. 2012 - Oct. 2016

### EXPERIENCE

### Graduate Teaching Assistant

Aug 2019 – Present

Detroit, MI

Wayne State University

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

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

• Taught undergraduate programming, data structure and Algorithms courses

Lecturer

Jan. 2017 – July 2019

Dhaka, Bangladesh

- University of Information Technology and Sciences
  - Worked as a mentor for programming contest team

# Internship on 5G wireless communication

Sept 2017- Nov 2017

Magdeburg, Germany

Otto-Von-Guericke-Universität

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, Asif Kamal Turzo, Ming Dong, and Amiangshu Bosu. Automated identification of toxic code reviews: How far can we go? arXiv preprint arXiv:2202.13056, 2022 (Submitted to ACM Transactions on Software Engineering and Methodology (TOSEM)).
- 2. 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.

- 3. 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.
- 4. 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.

# 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)

### Volunteer Experience

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

# 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

Dr. Amiangshu Bosu, Assistant Professor, Department of Computer Science Wayne State University 5057 Woodward Ave., Suite 14200.1 Detroit, MI 48202 Email: amiangshu.bosu@wayne.edu