M SAIFUL BARI

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Ph.D. Student, Nanyang Technological University

`sbmaruf.github.io`

EDUCATION

Nanyang Technological University *2019 - Present*
Doctor of Philosophy (Ph.D.) CGPA: 4.63/5.0
Natural Language Processing
Computer Science and Engineering

Islamic University of Technology *2012-2016*
Bachelor of Science (BSc.) CGPA: 3.65/4.0
Computer Science and Engineering

SKILLS

Computer Languages	Python, C/C++
Tools & Library	Pytorch, Bash, Linux
Problem Solving	Deep Learning, Algorithms & Data Structure

HONORS & AWARDS

Scholarship 2019
NTU Research Scholarship, Fully funded Ph.D. scholarship for 4 years.

Scholarship 2012
OIC Scholarship for undergraduate study, Islamic University of Technology

Champion 2014
IUT Computer Programming Contest

Honorable Mention 2014
Human Expedition on Mars Timeline 2018

Champion 2015
IUT Computer Programming Contest

2nd/100 in Inter University Programming Contest 2016
Daffodill International University ACM ICPC world finals warmup contest 2016

6th/100+ in Inter University Programming Contest 2016
NSU Cybernauts National Programming Contest

EXPERIENCE

Applied Scientist Intern (Part Time) July 2021 - Jan 2022
Amazon Web Service

· Working on prompt tuning for multi-lingual models.

Applied Scientist Intern Aug 2020 - Oct 2020
Amazon Web Service

· Collaborated with Amazon Lex team.
· Worked on Cross-lingual Few-shot Adaptation.

Research Assistant
Sep 2017 - Aug 2018

Nanyang Technological University

· Research on MT, NER and Adversarial Training.
· Maintain internal GPU servers
· Maintain group web-site

Software Engineering Intern
Sep 2018 - Jan 2019

Aubichol IT Limited

· Worked on an early startup where the key responsibility was to design the architecture of sports analytic and Translation System.

Lecturer
June 2017 - Sep 2017

Southeast University

· Teaching undergradute CS student. Subject tought: * Introduction to C * Algorithms

Software Engineering Intern
Nov 2015 - Dec 2015

XeonBD

· The course of the internship goes through Cloud Computing and kernel virtualization.

Competitive Programmer
Nov 2012 - Nov 2016

Islamic University of Technology

· Solved different kinds of algorithmic and data structure based problem. Solve problem through codeforces, topcoder, lightoj, uva, codechef, hackerrank, projecteuler, coci, usaco. Solved around **2000 problems** in various online judge.

Competitive Programming Trainer
June 2014 - Nov 2016

· Taught Competitive Programming in different Universities in Bangladesh.

- Islamic University of Technology
- Khulna University of Engineering and Technology
- East West University
- Dhaka University of Engineering and Technology

PUBLICATION

1. Stephen H. Bach, Victor Sanh, Zheng-Xin Yong, Albert Webson, Colin Raffel, Nihal V. Nayak, Abheesht Sharma, Taewoon Kim, **M Saiful Bari**, Thibault Fevry, Zaid Alyafeai, Manan Dey, Andrea Santilli, Zhiqing Sun, Srulik Ben-David, Canwen Xu, Gunjan Chhablani, Han Wang, Jason Alan Fries, Maged S. Al-shaibani, Shanya Sharma, Urmish Thakker, Khalid Almubarak, Xiangru Tang, Xiangru Tang, Mike Tian-Jian Jiang, and Alexander M. Rush. **PromptSource: An Integrated Development Environment and Repository for Natural Language Prompts**, 2022

2. Victor Sanh, Albert Webson, Colin Raffel, Stephen Bach, Lintang Sutawika, Zaid Alyafeai, Antoine Chaffin, Arnaud Stiegler, Arun Raja, Manan Dey, **M Saiful Bari**, Canwen Xu, Urmish Thakker, Shanya Sharma Sharma, Eliza Szczechla, Taewoon Kim, Gunjan Chhablani, Nihal Nayak, Debajyoti Datta, Jonathan Chang, Mike Tian-Jian Jiang, Han Wang, Matteo Manica, Sheng Shen, Zheng Xin Yong, Harshit Pandey, Rachel Bawden, Thomas Wang, Trishala Neeraj, Jos Rozen, Abheesht Sharma, Andrea Santilli, Thibault Fevry, Jason Alan Fries, Ryan Teehan, Teven Le Scao, Stella Biderman, Leo Gao, Thomas Wolf, and Alexander M Rush. **Multitask Prompted Training Enables Zero-Shot Task Generalization**. In *International Conference on Learning Representations, ICLR*, 2022

3. **Bari, M Saiful**, Batool Haider, and Saab Mansour. **Nearest Neighbour Few-Shot Learning for Cross-lingual Classification**. In *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing*, pages 1745–1753, Online and Punta Cana, Dominican Republic, November 2021. Association for Computational Linguistics

4. **Bari, M Saiful**, Tasnim Mohiuddin, and Shafiq Joty. **UXLA: A Robust Unsupervised Data Augmentation Framework for Zero-Resource Cross-Lingual NLP**. In *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, ACL (Volume 1: Long Papers)*, pages 1978–1992, Online, August 2021. Association for Computational Linguistics

5. Tasnim Mohiuddin, **M Saiful Bari**, and Shafiq Joty. **AugVic: Exploiting BiText Vicinity for Low-Resource NMT**. In *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*, Online, 2021. Association for Computational Linguistics

6. Tasnim Mohiuddin, **M. Saiful Bari**, and Shafiq R. Joty. **LNMap: Departures from Isomorphic Assumption in Bilingual Lexicon Induction Through Non-Linear Mapping in Latent Space**. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing*, Virtual, November 2020

7. **M Saiful Bari**, Shafiq Joty, and Prathyusha Jwalapuram. **Zero-Resource Cross-Lingual Named Entity Recognition**. In *Proceedings of the 34th AAAI Conference on Artificial Intelligence*, AAAI '20, New York, USA, 2020. AAAI

8. Xiang Lin, Shafiq Joty, Prathyusha Jwalapuram, and **M Saiful Bari**. **A Unified Linear-Time Framework for Sentence-Level Discourse Parsing**. In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, ACL '19, Florence, Italy, 2019. ACL

9. **M Saiful Bari**. *Regression for Data Analytics*, chapter 2, pages 33–54. CRC Press, Boca Raton, September 2018. (in book: Data Analytics: Concepts, Techniques and Applications)

PROJECTS

⋆ Deep learning :: *Malay English Machine Translation System*
Details can be found here, https://sbmaruf.github.io/project/mt-system/

⋆ Deep learning :: *Named Entity Recognition System*
The details can be found here, https://github.com/sbmaruf/named-entity-recognition

⋆ Machine learning system :: *A CBIR System*
Details of the project can be found here, http://103.82.172.44:8080/xmlui/handle/123456789/93

⋆ Deep learning :: *Zero-Resource Cross-lingual Named Entity Recognition*
Details of the project can be found here, https://github.com/ntunlp/Zero-Shot-Cross-Lingual-NER