Pritom Saha Akash

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EDUCATION

University of Illinois at Urbana-Champaign — IL, USA
Ph.D. in Computer Science — *Aug. 2020 – Present*

Institute of Information Technology, University of Dhaka — Dhaka, Bangladesh
M.S. in Software Engineering — *Jan. 2018 – June 2019*

Institute of Information Technology, University of Dhaka — Dhaka, Bangladesh
B.S. in Software Engineering — *Jan. 2014 – Dec. 2017*

RESEARCH INTERESTS

Text Mining & **Information Extraction**, including Text Summarization, Information Retrieval, and Natural Language Processing

EXPERIENCE

Graduate Research Assistant — Aug. 2020 – Present
University of Illinois at Urbana-Champaign — *IL, USA*
- **Lab**: Data and Information Systems Laboratory
- **Advisor**: Prof. Kevin C. Chang

Software Engineer — Nov. 2019 – Aug. 2020
Samsung R&D Institute Bangladesh — *Dhaka, Bangladesh*
- Tizen Wearable Application Development Team in Mobile Application Group 2 (MAG2)
- Developing Samsung wearable applications in Tizen platform

Short Course Instructor — Jan. 2018 – Sep. 2019
Institute of Information Technology, University of Dhaka — *Dhaka, Bangladesh*
- Worked as an instructor in short courses of Web Programming, Web design and Office application

Software Engineer Intern — Jan. 2017 – June 2017
Datasoft System Bangladesh Limited — *Dhaka, Bangladesh*
- Involved in developing two in-house automation projects

PUBLICATIONS

1. **Pritom Saha Akash**, Jie Huang, Kevin Chen-Chuan Chang, Yunyao Li, Lucian Popa, ChengXiang Zhai. Domain Representative Keywords Selection: A Probabilistic Approach. *Findings of the 60th Annual Meeting of the Association for Computational Linguistics (Findings of ACL). 2022.*

2. Md. Eusha Kadir, **Pritom Saha Akash**, Sadia Sharmin, Amin Ahsan Ali, and Mohammad Shoyaib. A Proximity Weighted Evidential k Nearest Neighbor Classifier for Imbalanced Data. *In Pacific-Asia Conference on Knowledge Discovery and Data Mining, pp. 71-83. Springer, Cham, 2020.*

3. Md. Eusha Kadir*, **Pritom Saha Akash***, Sadia Sharmin, Amin Ahsan Ali, and Mohammad Shoyaib. Can a Simple Approach Identify Complex Nurse Care Activity? *In Adjunct Proceedings of the 2019 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2019 International Symposium on Wearable Computers (UbiComp/ISWC '19 Adjunct)* [*Equal Contribution]

4. **Pritom Saha Akash**, Md. Eusha Kadir, Amin Ahsan Ali and Mohammad Shoyaib. Inter-node Hellinger distance based Decision Tree, *In Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence, IJCAI-19.*

5. **Pritom Saha Akash***, Md. Eusha Kadir, Amin Ahsan Ali, Md. Nurul Ahad Tawhid and Mohammad Shoyaib. Introducing Confidence as a Weight in Random Forest. *2019 International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST).* [*Best Presenter]

6. **Pritom Saha Akash**, Ali Zafar Sadiq and Ahmedul Kabir. An Approach of Extracting God Class Exploiting Both Structural and Semantic Similarity. *ENASE 2019 : 14th International Conference on Evaluation of Novel Approaches to Software Engineering.*

7. Jeba, Tahmim, Tarek Mahmud, **Pritom Saha Akash**, and Nadia Nahar. God Class Refactoring Recommendation and Extraction Using Context based Grouping.

8. Md. Eusha Kadir, **Pritom Saha Akash**, Amin Ahsan Ali, Mohammad Shoyaib and Zerina Begum. Evidential SVM for binary classification. *ICASERT-2019: 1st International Conference on Advances in Science, Engineering and Robotics Technology.*

9. Ali Zafar Sadiq, Ahmedul Kabir, **Pritom Saha Akash** and Md. Jubair Ibna Mostafa. Analyzing Corrective Maintenance using Change Coupled Clusters at Fix-inducing Changes. *2019 International Conference on Electrical, Computer and Communication Engineering (ECCE).*

PREPRINTS

1. **Pritom Saha Akash**. Exploring Variational Graph Auto-Encoders for Extract Class Refactoring Recommendation. arXiv preprint arXiv:2203.08787 (2021).

2. **Pritom Saha Akash**, Wei-Cheng Lai, and Po-Wen Lin. Online Aggregation based Approximate Query Processing: A Literature Survey. arXiv preprint arXiv:2204.07125 (2021).

MASTER'S THESIS

- **Pritom Saha Akash**, An Evidential Inter-node Hellinger Distance based Tree Classifier, *Institute of Information Technology, University of Dhaka, 2019.*

SENIOR PROJECT

Context Sensitive Bengali Spell Checker   Jul. 2017 - Nov. 2017
- A Bengali Spell Checker for detecting and recommending corrections of typographic and contextual errors
- Developed using Python 3.5 and Django 1.11.2

AWARDS & GRANTS

1. 2019 IEEE Computer Society Bangladesh Chapter's Award for Award for Academic & Research Excellence in recognition of Outstanding Research Accomplishments

2. Winner in a Human activity recognition challenge called *NURSE CARE ACTIVITY RECOGNITION CHALLENGE* as a part of HASCA workshop at Ubicomp 2019

3. Awarded for *IJCAI-AIJ 2019 TRAVEL and ACCESSIBILITY GRANT*

4. Awarded as the best presenter in an international conference, ICREST 2019

5. Awarded as an ICT fellow (2018-19) under ICT Division Bangladesh

ADITIONAL INFORMATION

External Reviewer: KDD 2021,2022; SIGIR 2021,2022; CIKIM 2021; ICDM 2021; WSDM 2021

Technical Skills

Programming: Python, Java, Matlab, C/C++, MySQL, JavaScript, R
Software and Tools: PyTorch, scikit-learn, Git, LaTex, IntelliJ, Eclipse, Android Studio