

Pritom Saha Akash

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EDUCATION

University of Illinois at Urbana-Champaign

Ph.D. in Computer Science

IL, USA

Aug. 2020 – Present

Institute of Information Technology, University of Dhaka

M.S. in Software Engineering

Dhaka, Bangladesh

Jan. 2018 – June 2019

Institute of Information Technology, University of Dhaka

B.S. in Software Engineering

Dhaka, Bangladesh

Jan. 2014 – Dec. 2017

RESEARCH INTERESTS

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

EXPERIENCE

Graduate Research Assistant

University of Illinois at Urbana-Champaign

Aug. 2020 – Present

IL, USA

- **Lab:** Data and Information Systems Laboratory
- **Advisor:** Prof. Kevin C. Chang

Software Engineer

Samsung R&D Institute Bangladesh

Nov. 2019 – Aug. 2020

Dhaka, Bangladesh

- Tizen Wearable Application Development Team in Mobile Application Group 2 (MAG2)
- Developing Samsung wearable applications in Tizen platform

Short Course Instructor

Institute of Information Technology, University of Dhaka

Jan. 2018 – Sep. 2019

Dhaka, Bangladesh

- Worked as an instructor in short courses of Web Programming, Web design and Office application

Software Engineer Intern

Datasoft System Bangladesh Limited

Jan. 2017 – June 2017

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)* [Both Md. Eusha Kadir and Pritom Saha Akash are the first author]
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 Award]

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 (2022).
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 (2022).

MASTER'S THESIS

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

PROJECTS

Context Sensitive Spell Checking Tool for Bangla Language	Jul. 2017 - Nov. 2017
<ul style="list-style-type: none"> • A Bangla Spell Checker that can detect and provide suggestions for typographic and contextual error in a sentence • Developed using Python 3.5 and Django 1.11.2 	
Graduate Verification System	Aug. 2017 - Oct. 2017
<ul style="list-style-type: none"> • A web-based system for verification of a graduate • Developed using using PHP, Laravel, Mysql 	
Budget Planning System	Sept. 2016 - Nov. 2016
<ul style="list-style-type: none"> • A web-based system for planning yearly budget of IIT, University of Dhaka • Developed using PHP, MySQL 	
Home Budget Manager	Feb. 2015 - May 2015
<ul style="list-style-type: none"> • An Android application to set budget and track your earnings-expenses • Developed using Java, Android Studio 1.0 & SQLite 	

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

TECHNICAL SKILLS

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