Pritom Saha Akash

(+1)2179792968 | pakash2@llinois.edu | pritomsaha.github.io

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. **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.*

3. 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.*

4. 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]

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

- **Pritom Saha Akash**, "Exploring Variational Graph Auto-Encoders for Extract Class Refactoring Recommendation", *ResearchGate preprint:* 10.13140/RG.2.2.14480.94727. 2021.

- **Pritom Saha Akash**, Wei-Cheng, LaiPo-Wen Lin, "Online Aggregation based Approximate Query Processing: A Literature Survey", *ResearchGate preprint:* 10.13140/RG.2.2.12803.22567. 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 Spell Checking Tool for Bangla Language   Jul. 2017 - Nov. 2017
- A undergrad research project, worked individually
- 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

Awards & Grants

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

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

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

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

- 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