Asadullah Hill Galib

asadgalib19@gmail.com +1-414-242-0786 2733 Senate Drive, Lansing, MI 48912
linkedin.com/in/galib19 galib19.github.io github.com/galib19

Education

Michigan State University, MI, USA *August 2020 - Present*
Ph.D. in Computer Science and Engineering, CGPA: **4.00**/4.00
Advisor: Dr. Pang-Ning Tan, Domain: Deep Learning, Spatio-Temporal Analysis, Extreme Value Theory, Tipping Point

University of Dhaka, Dhaka, Bangladesh *January 2019 - December 2020*
M.Sc. in Software Engineering, CGPA: **3.54**/4.00
Thesis: Significant Features Analysis For Android Malware Detection Using Machine Learning Techniques

University of Dhaka, Dhaka, Bangladesh *January 2015 - December 2018*
B.Sc. in Software Engineering, CGPA: **3.33**/4.00

Technical Skills

Programming Languages: Python, Java, C, C++, PHP, JavaScript, Assembly
Machine Learning & Deep Learning: PyTorch, Keras, TensorFlow, scikit-learn, pandas, NumPy, MATLAB
Miscellaneous: MySQL, Oracle, SQLite, React, jQuery, React Native, Laravel, Selenium, Foritfy, Git, Agile, MVC, SRS

Experience

Graduate Teaching Assistant, *Michigan State University (CSE)* *August 2020 - December 2021*

- Taking two 1.5-hours class sessions a week including labs of 240+ students, managing cohorts, proctoring exams, grading assignments, and serving help room sessions.

Software Developer & Executive Assistant (Internship), *Brain Station 23* *January 2018 - June 2018*

- Developed and maintained web application and mobile application, using Laravel Framework, PHP, MySQL, React-Native, Redux-Saga, Android Studio, Postman and proper version-controlling (Git, SourceTree).
- Carried out comparative analysis of two e-commerce frameworks. Reviewed an existing system for updates and enhancement.

Academic and Research Projects

- **Predicting GitHub Issues Lifetime using Machine Learning and Topic Modeling (LDA):** Analyzing the characteristics and applicability of topic modeling (LDA) in GitHub Issues and predicting lifetime based on topic modeling (LDA) with machine learning techniques. Manuscript Ready.
- **Pre-birth Factors in the Early Assessment of Child Mortality using Machine Learning Techniques:**. Incorporating pre-birth factors, such as birth history, maternal history, reproduction history, socio-economic condition, etc. for the early classification of child mortality. Manuscript Ready.
- **Optimizing Search Space in Code Smells Detection using a Novel Metric:** Significantly reducing search space using a novel metric called - NCPC, while maintaining the performance of code smells detection. Manuscript submitted for publication.
- **Analyzing co-authorship network: Centrality Measure, Link Prediction, and Community Detection:** An analysis of a network of co-authorship relations between researchers. It includes network creation from XML data, data exploration, centrality measure, missing links prediction, and community detection.

Publications

- **Galib, A. H.**, & Tan, P. N. (2021, Sept.). DeepExtrema: A Deep Learning Approach for Extreme Value Prediction in Time Series Data. Manuscript ready.
- **Galib, A. H.**, & Hossain, B. M. (2020, Jul.). Significant API Calls in Android Malware Detection (Using Feature Selection Techniques and Correlation Based Feature Elimination). In Proceedings of the 32nd International Conference on Software Engineering Knowledge Engineering (pp. 566-571).
- **Galib, A. H.**, & Hossain, B. M. (2019, Dec.). A Systematic Review on Hybrid Analysis using Machine Learning for Android Malware Detection. In 2019 2nd International Conference on Innovation in Engineering and Technology(ICIET)(pp. 1-6). IEEE.
- Yasir, R. M., Asad, M., **Galib, A. H.**, Ganguly, K. K., & Siddik, M. S. (2019, May). GodExpo: an automated god structure detection tool for Golang. In Proceedings of the 3rd International Workshop on Refactoring (pp. 47-50). IEEE Press.

Leadership Activities

Organizer, First Software Industry-Academia Collaboration Session with 10 leading companies (2017), Boot Camp on technology for peace, Seminar on the fourth industrial revolution, Workshops on secured internet protocol and IT awareness for females.
Vice President & Treasurer, IIT Software Engineers' Community, University of Dhaka
Editor & Author, Shoshikkha - A web-based knowledge platform

Academic & Professional Projects

- **LifeBlood:** A GPS based blood donor finder android app which sorts out nearer blood donors across the map. In addition, a user rating system, a review system and profiling of donors are being implemented.
- **AutoPilot-Web:** A web-based digital transformation of BTS (Base transceiver station) management. Its purpose is to optimize and automate the existing network management system.
- **AutoPilot-Mobile:** A mobile application (iOS and Android) for the digital transformation of BTS (Base transceiver station) management.
- **LogBook:** A web-based application for personal task management including task manager, notes, attachments, reminders and synchronization.
- **Offline-Search-Engine:** An Offline (file-folder) search engine for Linux and Windows operating systems.

Scholarships and Honors

- **Board Merit Scholarship** and full tuition waiver in the undergraduate study at the University of Dhaka, Bangladesh for excellence in H.S.C Examination, 2014, Dhaka Board.

Standardized Test

GRE: 320/340 (Quantitative - 165/170, Verbal - 155/170, Analytical Writing - 3.0/6.0)

TOEFL: 102/120 (Reading - 29/30, Listening - 23/30, Speaking - 24/30, Writing - 26/30)

References

Available upon request