Md Abdullah Al Mamun

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Website: pwaabdullah.github.io | LinkedIn: newabdullah | GitHub: pwaabdullah | Google Scholar

Graduate Research Assistant

I'm a computer science **PhD candidate** at FIU with an overall work experience of 5 years predominantly working in an Agile environment and demonstrated expertise in Problem-solving, Software development, and System design. I'm working at the Machine Learning and Data Analytics (MLDAG) research lab. I'm a **Champion** on GCC Robotics Challenge at Qatar 2017 organized by IEEE/IET.

PROFESSIONAL EXPERIENCES

Graduate Assistant at Florida International University, Miami, USA.

2 years+ (Aug 2018 – Present)

- Developing an intelligent feature selection framework for high dimensional data towards better classification/clustering tasks. Language/Tools: Python, TensorFlow, Keras, GPU
- Developed a deep learning based model for sleep stages classifier. Language: Java
- Developed deep learning models for cancer classification. Language: Python
- Taught OOP (C++, Python), HCI to UG students

Freelance Software Engineer at RI, King Fahd University of Petroleum and Minerals, KSA. 2 years (

2 years (2015 -2017)

Developed a deep learning model using LSTM to analyze tweets. Language: Python

Software Engineer at Personal Web Assistant Corporation, USA (Dhaka Office).

3 years (2013 – 2015)

Developed and maintained web apps like http://pwame.com. Tools/Language: PHP, SQL, HTML5, JS

HIGHER EDUCATIONS

PhD in Computer Science at Florida International University.

Aug 2018 - Dec 2021

- Implemented an OS file system. Language: C++
- Developed semi-supervised real-time tweet spam filter. Language/Tools: Java, Hadoop, Spark-Streaming
- Graduate Courses: (1) Advanced Data Mining (2) Analysis of Algorithm (3) Advanced Information Processing (4)
 Operating System (5) Theory of Computation

MS in Computer Engineering at King Fahd University of Petroleum & Minerals, KSA.

2015 - 2017

- Implemented an embedded system for motion control of an omnidirectional mobile robot. Language/Tools: C/C++, MATLAB, Arduino
- Developed an intelligent framework to add new features into an existing product line using several optimization algorithms. Language: Java

BS in Computer Science at Dhaka University of Engineering and Technology, Dhaka, Bangladesh.

2007 - 2012

RESEARCH WORKS

- **2020** Al Mamun, Abdullah, Kalai Mathee, Giri Narasimhan, and Ananda Mohan Mondal. "Molecular Subtype Classification Using Recursive I1-norm Multiclass SVM Reveals Key IncRNAs for Breast Cancer" in BMC Bioinformatics 2020. *Under review*.
 - Al Mamun, Abdullah, Ananda Mondal. "Feature Selection and Classification Reveal key IncRNAs for Multiple Cancers." In 2019 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). IEEE, 2019.
- 2019 Al Mamun, Abdullah, and Ananda Mohan Mondal. "Long Non-coding RNA Based Cancer Classification using Deep Neural Networks." In *Proceedings of the 10th ACM International Conference on Bioinformatics, Computational Biology and Health Informatics*, ACM, 2019.

- M. H. Al-Meer and **Al Mamun**, **Abdullah** "Deep Learning in Classifying Sleep Stages," *2018 Thirteenth International Conference on Digital Information Management (ICDIM)*, Berlin, Germany, 2018, pp. 12-17.
- 2018 AlSaad, R., Al-Máadeed, S., Al Mamun, Abdullah, & Boughorbel, S. (2018, July). A Deep Learning Based Automatic Severity Detector for Diabetic Retinopathy. In *International Conference on Machine Learning and Data Mining in Pattern Recognition*(pp. 64-76). Springer, Cham.

Al Mamun, Abdullah, Mohammad Tariq Nasir, and Ahmad Khayyat. "Embedded System for Motion Control of an Omnidirectional Mobile Robot." *IEEE Access*, vol. 6, pp. 6722-6739, Jan 2018. (Q1, IF 4.09)

PERSONAL SKILLS

- Languages: English: Proficient (Reading: Fluent, Writing: Advance, Speaking: Fluent)
- Programming languages/Tools: Machine Learning, Data Analytics, Data Science, Software Engineering, Web Development, Bioinformatics, Algorithms, Data Structures, Python, C/C++, R, Keras, TensorFlow, Scikit-learn, SQL, GitHub, LaTeX, MATLAB, PHP, HTML5
- Summer Trainer of Python course for 20 high school teachers at FIU under NSF RET program, 2019 and 2020
- **Team Lead** of embedded system team for International Robotic Soccer Competition (RoboCup-SSL club) at KFUPM, 2016

CERTIFICATIONS

- End-to-End Machine Learning with TensorFlow on GCP (Google Cloud Platform) offered by **Google**, 2020
- Distributed System and Cloud Computing Concept (Part-1 and Part-2) offered by University of Illinois at Urbana-Champaign, 2015

AWARDS RECEIVED

- Champion, 2nd GCC Robotics Challenge at Qatar, 2017. Organized by IEEE and IET
- Internal Research Award for outstanding research contribution from Qatar University, 2018
- NSTIP Award from Ministry of Science Research and Technology, KSA at KFUPM, 2014 2015
- Deanship Award (Full-fund for MS) at KFUPM, 2014 2017
- Academic Excellence Award for BS at DUET, Bangladesh, 2008 2012
- Graduate Teaching Assistantship, Florida International University, USA, 2018 Present
- Conference Travel Fellowships
 - 10th ACM International Conference on Bioinformatics, Computational Biology and Health Informatics, NY, USA, 2019
 - IEEE International Conference on Bioinformatics and Biomedicine, San Diego, USA, 2019
 - IEEE International Conference of Electrical and Electronic Technologies for Automotive, Milan, Italy,
 2018
 - 13th International Conference on Digital Information Management (ICDIM), Berlin, Germany, 2018