Md Abdullah Al Mamun

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Graduate Teaching Assistant

I'm a computer science PhD candidate with an overall work experience of 3 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 group. I'm a Champion on GCC Robotics Challenge at Qatar 2017 organized by IEEE/IET.

Skills: Algorithms, Data Structures, Machine Learning, Data Mining, Data Analysis, Data Science, Software Engineering, Backend Web Development, Bioinformatics, Python, C/C++, R, Keras, TensorFlow, Scikit-learn, SQL, GitHub, LaTeX, MATLAB, PHP, HTML5

WORK EXPERIENCES

2018 – Now Graduate Teaching Assistant at Florida International University, Miami, USA.

Taught OOP (C++, Python), HCI to UG students

Highlighted Projects [GitHub links]

- Developing an intelligent feature selection framework for high dimensional data towards better classification/clustering task. Language/Tools: Python, TensorFlow, Keras, GPU
- Developed deep learning based model for sleep stages classifier. Language: Java
- Developed deep learning models for cancer classification. Language: Python
- 2017 2018 **Teaching Assistant** at Qatar University, Doha, Qatar.
 - Taught OOP (C++, Python) to UG students
- 2015 2017 **Freelance Software Developer** at Research Institute, King Fahd University of Petroleum and Minerals, KSA.
 - Developed an deep learning model using LSTM to analyze tweets. Language: Python
- 2013 2015 Software Developer Engineer I at Personal Web Assistant Corporation, USA (Dhaka Office).
 - Developed and maintained http://pwame.com. Tools/Language: PHP, SQL, HTML5, JS

HIGHER EDUCATIONS

- 2018 Dec 21 PhD Candidate in Computer Science at Florida International University. (Expected Grad.: Dec 21)
 Highlighted Course Projects [GitHub links]
 - 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

- 2015 2017 MS in Computer Engineering at King Fahd University of Petroleum & Minerals, KSA.
 Highlighted Projects
 - 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/Tools: Java
- 2008 2011 BS in Computer Science at Dhaka University of Engineering and Technology, Dhaka, Bangladesh.

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 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

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)

LEADERSHIP SKILLS

- 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