Riyad Bin Rafiq

+1 (940)-808-6120 | RiyadBinRafiq@my.unt.edu | Personal website: https://riyadrafiq.github.io/ |
Google Scholar: https://scholar.google.com
Github: https://github.com/riyadRafiq | Linkedin: linkedin.com/in/riyad-bin-rafiq

Education

- **Ph.D. Student**, Computer Science and Engineering, University of North Texas, Spring' 21 - Present, 4.00/4.00, Advisor: Mark V. Albert, Ph.D
- **B.Sc**, Computer Science and Engineering, Chittagong University of Engineering and Technology-Bangladesh, 2018

Experience

Graduate Teaching Assistant, University of North Texas, Fall'21 - Present
- Working as TA in CSCE 5280, AI for wearables and Healthcare (Fall' 22).
- Worked as TA in CSCE 5215, Machine Learning course (Spring' 22); CSCE 1030, Computer Science I (Fall' 21).

Graduate Research Assistant, Biomedical AI Lab, University of North Texas, Spring'21 - Present
- Currently working on a personalized gesture recognition system in a medical application using sensor data, particularly for individuals unable to speak.
- Worked in proper machine learning model validation research.

Junior Software Engineer, JMJ CODE, Oct'20 - Dec'20
- Full Stack Web Developer. Technologies: Asp .Net, HTML, CSS, Javascript, MySQL

Research Student, Jan'18 - Mar'19
- Research on developing a mobile application to automatically measure the foot dimensions using 2D image and 3D model under supervision of Ashad Kabir, Ph.D.

Technical Knowledge

- Machine Learning and Deep Learning: Python, Tensorflow, Keras, scikit-learn
- Android Application Development
- Web Application Development: HTML, CSS, Javascript, ASP .NET

Publications

- **Rafiq RB,** Hakim SMA, Tabashum T (2021) "Real-time Vision-based Bangla Sign Language Detection Using Convolutional Neural Network". 10th International Conference on Advances in Computing and Communications, pages 1-5
- **Rafiq RB,** Modave F, Guha S, Albert MV (2020) "Validation Methods to Promote Real-world Applicability of Machine Learning in Medicine". 3rd International Conference on Digital Medicine and Image Processing, pages 13-19
- **Rafiq RB,** Karim SA, Albert MV (2022) "*TalkMotion*: A mobile application to communicate through speech generation using hand gestures" (Submitted)
- **Rafiq RB**, Hoque KM, Kabir MA, Ahmed S, Laird C (2022) "*OptiFit*: Computer Vision-based Smartphone Application to Measure the Foot from Images and 3D Scans" (Submitted)
- **Rafiq RB,** Yount S, Jerousek S, Roth EJ, Cella D, Albert MV, Heinemann AW (2021): "Feasibility of PROMIS using Computerized Adaptive Testing during Inpatient Rehabilitation" (Under review)

Poster Presentations

- **Rafiq RB**, Karim SA, Liu A, Albert MV. "A gesture-to-speech recognition mobile application prototype" American Congress of Rehabilitation Medicine (ACRM 2021) Sep 26-29, 2021
- **Rafiq RB**, Modave F, Guha S, Albert MV. "Validation Methods to Promote Real-world Applicability of Machine Learning in Medicine" ACM Tapia Conference Sep 16-19, 2020

Relevant Certification and Course

Deep Learning, Spring 22; Machine Learning, Fall 21; Deep Learning by Neuromatch Academy, Summer 2021; Software Development for AI, Spring 21; Big Data, Data Science, Spring 21; Deep Learning, Machine Learning, IBM Data Science; Coursera 2019-20