ABDULLAH AL MAMUN

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RESEARCH INTERESTS

- Machine Learning
- Active Learning
- Deep Learning
- Computer Vision
- Mobile Health
- Data Privacy

EDUCATION

Arizona State University Jan. 2022- present
Ph.D in Computer Science (ongoing) GPA: 4.00/4.00

- Advisor: Dr. Hassan Ghasemzadeh
- Graduate courses: Reinforcement Learning, Embedded Machine Learning, Planning and Learning in AI, Data Processing at Scale
- Coursework completed: 12 credits
- In progress courses: Knowledge Representation, Software Verification, Validation, and Testing

Washington State University Jan. 2021- Dec. 2021
Ph.D in Computer Science (transferred after 1 year) GPA: 3.86/4.00

- Advisor: Dr. Hassan Ghasemzadeh
- Graduate courses: Machine Learning, Advanced Linear Algebra, Numerical Analysis, Neural Networks Design and Application, Convex and Nonlinear Optimization
- Coursework completed: 15 credits

Bangladesh University of Engineering and Technology Jul. 2014 – Oct. 2018
B.Sc. in Computer Science & Engineering GPA: 3.70/4.00

- Thesis: Comparative Analysis of Modern Garbage Collectors for Big Data in Distributed Systems
- Thesis advisor: Dr. Rifat Shahriyar

SELECTED RESEARCH WORKS

Multimodal Time-Series Activity Forecasting for Adaptive Lifestyle Intervention Design
Paper accepted in IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN), 2022
Received the best paper (honorable mention) award at the BSN 2022 conference.
*Authors: **A. Mamun**, K.S. Leonard, M.P. Buman, and H. Ghasemzadeh*

Designing Deep Neural Networks Robust to Sensor Failure in Mobile Health Environments
Paper accepted in IEEE Engineering in Medicine and Biology Conference (EMBC), 2022
*Authors: **A. Mamun**, S.I. Mirzadeh, and H. Ghasemzadeh*

An empirical approach to understand mHealth application engagement and its associations with daily changes in physical activity in a lifestyle intervention among US Veterans with Prediabetes
Abstract accepted for presentation in ISMPB ICAMPAM conference, 2022
*Authors: K.S. Leonard, **A. Mamun**, H. Ghasemzadeh, and M.P. Buman*

Time-Series Wearable Activity Forecasting (in progress)

- We have a manuscript ready to submit to a journal for our work on time-series activity forecasting using app engagement and previous physical activity of a person.

EMPLOYMENTS

Arizona State University – Graduate Research Associate Dec. 2021 - present

- Lab: Embedded Machine Intelligence Lab (EMIL) (Director: Dr. Hassan Ghasemzadeh)

Washington State University - Teaching Assistant Aug. 2021- Dec. 2021

- Course assigned: Advanced Data Structures C/C++ (Instructor: Dr. Yan Yan)

· Duties: Grading programming assignments and homework, holding office hours, answering students' questions, and helping them debug their code and environment

Washington State University - Research Assistant Jan. 2021 – Aug. 2021

· Lab: Embedded & Pervasive Systems Lab (EPSL) (Director: Dr. Hassan Ghasemzadeh)

United International University – Lecturer, *Dept of CSE* Sep. 2019 – Jan. 2021

· Courses taught: Software Engineering, Object-Oriented Programming, Digital System Design, Structured Programming Language, System Analysis and Design, and several laboratory courses

HLC Technologies Limited - Software Developer Nov. 2018 – Sep. 2019

· Selected Projects: Cybersecurity solution for different platforms, Patch management and Configuration monitoring tools, Online learning management system
· Tools: Python, Java, MySQL, Shell, ReactJS
· Platforms: Windows, MacOS, Ubuntu, CentOS

STANDARDIZED TESTS

· GRE General Test (Aug. 2019):
Quant – 166 (86th percentile), Verbal – 156 (72nd percentile), Writing – 4.0 (54th percentile)
· TOEFL iBT Test (Nov. 2019):
Total – 101. Reading – 26, Listening – 26, Speaking – 23, Writing – 26.
· WSU ITA Exam (Oct. 2021):
Score – Category 2+ (87/100): "Approved for being the sole instructor of upper-level classes (junior and senior level) and all TA jobs that supplement and/or support another instructor."
· ASU Speak Test (August 2022):
Score – 50 / 60: Certified with qualifications

AWARDS & SCHOLARSHIPS

· Best paper (honorable mention) award at the BSN 2022 conference for the paper, "Multimodal Time-Series Activity Forecasting for Adaptive Lifestyle Intervention Design" (2022)
· 19th position at Bengali Handwritten Digit Recognition challenge by Bengali.ai (2018)
· University Merit List Scholarship by BUET (2017)