

Jannat Tumpa

Milwaukee, Wisconsin, USA

Actively looking for Internship opportunities

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Education

- **Marquette University** Milwaukee, Wisconsin
Ph.D. in Computer Science (Passed Qualifier and Proposal Defense) Fall 2017-Current
 - Dissertation Topic: Designing a community telemedicine framework with an Explainable Retinal Screening Model and Self-management support to improve the eye health of the Diabetic population
- **Marquette University** Milwaukee, Wisconsin
M.S. in Computing—CGPA: 3.89/4.0 May 2020
 - Relevant courses: Advanced Machine Learning, Computer Vision, Advanced Data Science, Social and Ethical Implications of Data, Parallel and Distributed System, Introduction to Cyber Security, Elements of Software Development
- **Bangladesh University of Engineering and Technology** Dhaka, Bangladesh
B.Sc. in Computer Science and Engineering—CGPA:3.33/4.0 Feb 2011-March 2016
 - Relevant courses: Programming Languages (Python, C, C++, Java), Data Structure, Algorithms, Algorithmic Engineering, Database, Computer Architecture, Compiler, Operating System, Computer Networks, Artificial Intelligence, Graphics, Computational Geometry

Experience

- **Investment Data Analytics Intern** Public Investment, Northwestern Mutual
Supervisor: Jason Schultz Summer 2019
 - Analyzing Barclay's Research data to develop factor model for finding investment risk and opportunities using Bloomberg BQNT platform
- **Graduate Research Assistant** Ubicomp Lab, Marquette University
Advisor: Dr. Sheikh Iqbal Ahamed Aug'18-Current
 - Working on developing an Interpretable Retinal Screening model with CNN architectures utilizing the techniques to achieve Interpretability in ML
 - Designed and developed a collaborative tele-medicine framework collaborating with Medical College of Wisconsin and Milwaukee Health Dept. currently used for retinal screening in community-settings.
 - Designed and developed a Self-Management Support Tool based on Motivational Interviewing principles in collaboration with Department of Physical therapy at Marquette University
- **Graduate Teaching Assistant** Marquette University
Dept. of Computer Science
 - **Instructor of Record** for "Object-Oriented Software Design" course using Java as an in Spring'20
 - **Lab instructor** for "Intro to Computer Programming" course using Python in Fall'17 and Fall'19
 - **Lab instructor** for "Object-Oriented Software Design" course using Java in Spring'18
- **Software Engineer** SureCash, Progoti Systems Limited
Mobile App Development Team March 2016 - May 2017
 - Designed and developed Mobile App for financial transaction using Ionic 2 (a cross-platform framework) which was published both in Google Play Store and Apple App Store

Skills and Certificates

Programming Languages: Python (Most proficient), Java, C, C++, JavaScript

Frameworks and Tools: Django, iOS (Swift), Ionic 2 (Cross-platform), Angular 2, Pandas, Tensorflow, Keras

Research Area: Connected Health, Behavioral Science, Machine Learning, Interpretable AI, Medical Imaging

Online Certifications: Neural Networks and Deep Learning, Improving Deep Neural Networks

Personal Skills: Strong Interpersonal and leadership skill, Collaboration experience, Fast learner, Team player

Honors and Awards

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| Graduate School Deans Research Enhancement Award | 2020 |
| SIGCHI Student Travel Grant to attend CSCW | 2020 |
| NSF Student Travel Award to attend CHASE Conference | 2019 |
| Northwestern Mutual Data Science Institute Scholar | 2019 |
| NSF Travel Award to attend CRA-W Grad Cohort for Women | 2019 |
| Student Scholarship at Grace Hopper Celebration | 2018 |
| Student Scholarship at Grace Hopper Celebration, India | 2015 |

Selected Publications and Posters

- Tumpa, J., Adib, R., Das, D., Ahamed, S. I., Kim, J., Medic, V., ... Romant, J. (2020, October). Community-based Retinal Screening with Multilingual Software Support to Overcome Language Barriers of Minority Communities. In 23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) 2020.
- Tumpa, J., Adib, R., Das, D., Ahamed, S. I., Kim, J., Medic, V., ... Romant, J. (2019, September). mTEH: A Decision Support System for Tele-Ophthalmology to Improve Eye Health of Wisconsin Population in Community Settings. In 2019 IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE) (pp. 25-26). IEEE.
- Hasan, M. K., Haque, M. M., Adib, R., Tumpa, J. F., Begum, A., Love, R. R., ... & Sheikh, I. A. (2018). Smarthelp: Smartphone-based hemoglobin level prediction using an artificial neural network. In AMIA Annual Symposium Proceedings (Vol. 2018, p. 535). American Medical Informatics Association.
- Ahsan, G. M. T., Tumpa, J. F., Adib, R., Ahamed, S. I., Petereit, D., Burhansstipanov, L., ... & Dignan, M. (2018, July). A culturally tailored intervention system for cancer survivors to motivate physical activity. In 2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC) (Vol. 1, pp. 875-880). IEEE.
- "E-BAP: A scalable and flexible web-based software system to support self-management for behavior changes" at IEEE Biomedical Health and Informatics (BHI) 2019.
- "The Development of Electronic Brief Action Planning (E-BAP): A Self-Management Support Tool for Health Behavior Change" at the 42nd Annual meeting of The Society for Medical Decision Making (SMDM) 2019.
- "Preventing Vision loss of Diabetic Patients: Diabetic Retinopathy Assessment System" at general poster session of Grace Hopper Celebration 2019.
- "MARQUECare: Information Technology Tools and a System for Palliative Care for Everyone" at Healthy People on a Healthy Planet Conference 2019
- "Automated Detection of Diabetic Retinopathy And Building Cost-effective Fundus Camera" at Medical College of Wisconsin's Community Engagement Spring Conference 2018.

Services and Extra-curricular Activities

- Serving as Graduate Consultant for three years and a pioneer member of **ACM-W Student Chapter at Marquette University** which works towards reducing gender gap in STEM
- Volunteered as Poster Committee Member for **GHC 2020** with AnitaB.org
- Volunteer at **International Conference Machine Learning (ICML)** 2020
- Volunteer at Marquette's **Girls Who Code (GWC)** club
- Received Awards in Undergraduate level and Inter-University **Math Olympiad**
- Participated in Debate, Elocution, Spelling Bee, Anchoring etc. in High School.