



Riddhiman Adib

Ph.D. Candidate, Graduate Research Assistant

@ riddhiman.adib@marquette.edu +1-414-248-6560 Milwaukee, WI
adib2149.github.io github.com/adib2149

Education

Ph.D. in Computer Science

Marquette University

Aug. 2017 – (Expected) May. 2022 Milwaukee, WI, USA

- **Relevant Courses:** Advanced Machine Learning, Advanced Data Science, Advanced Algorithms, Introduction to Intelligent Systems, Social and Ethical Implications of Data, Elements of Software Development.
- **GPA:** 3.96

M.S. in Computing

Marquette University

Aug. 2017 – May. 2020 Milwaukee, WI, USA

- **Specialization:** Big Data and Data Analysis
- **GPA:** 3.96

B.Sc. in Electrical and Electronics Engineering

Bangladesh University of Engineering and Technology (BUET)

May. 2010 – Sep. 2015 Dhaka, Bangladesh

- **GPA:** 3.32

Experience

Summer Research Intern (Visiting Scholar)

Regenstrief Center for Healthcare Engineering at Purdue University

Summer 2019 West Lafayette, IN

- **Causal Inference:** Exploring underlying causal structure through structure learning algorithms from observational dataset on Delirium patients in ICU, quantifying efficacy of anti-psychotic drugs in its treatment, and related causal explorations.

Graduate Assistant

Ubicomp Lab, Marquette University

Fall 2017 – Present Milwaukee, WI

- **Graduate Research Assistant:** (June 2018 – Present) Research Assistant in multiple mHealth projects, involving 'Self-management Intervention for Parents of Transplanted Children', 'Veteran Mental Health Crisis Management'
- **Graduate Teaching Assistant:** (Aug. 2017 – May 2018) Teaching Assistant for Calculus 1 and Calculus 2
- **Lab Manager:** (Jan. 2019 – Present) User access management and maintenance of code repositories, live servers, and lab research equipment

Software Engineer

Harriken.com Limited

Oct. 2015 – May. 2017 Dhaka, Bangladesh

- **Android Lead:** (Apr. 2016 – May. 2017) Executing existing app expansions and related research & development
- **Software Developer:** (Oct. 2015 – Mar. 2016) Building the mobile solution from scratch on Android Platform and related web services development and deployment on AWS

Objective

Fourth-year Ph.D. candidate with strong communication skills and ability to explore novel research methodologies independently or as part of a team. Actively working in the field of Causal Inference, and seeking a data science/machine learning internship in related domains to help disentangle causal stories from data through hands-on experience.

Projects

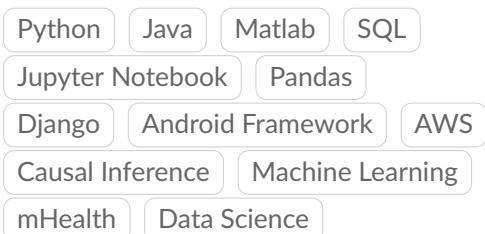
Research Projects:

- **Causal Inference:** Application of causal inference framework in finding effects of anti-psychotic drug intervention on delirium patients in the ICU and related causal explorations
- **Electronic Palliative Care:** Electronic Palliative care solution for critically ill people in developing countries
- **Veteran Crisis Management:** Crisis management in PTSD-affected veterans via peer mentor relationship using mHealth tools

Applications

- **BottomNavBar:** Open-source Android library to add bottom navigation bar to application (*202 Github stars*)
- **FormMaster:** Open-source Android library to easily build and use larger forms (*150 Github stars*)
- **Harriken:** Restaurant discovery android app, widely-used and based in Dhaka, Bangladesh

Skills



Selected Publications

- Adib, R., Griffin, P., Ahamed, S. I., & Adibuzzaman, M. (2020, September). A Causally Formulated Hazard Ratio Estimation through Backdoor Adjustment on Structural Causal Model. In Machine Learning for Healthcare Conference (pp. 376-396). PMLR.
- Adib, R., Aldawod, E., Lang, N., Lasswell, N., & Guha, S. (2019, July). Analyzing Happiness: Investigation on Happy Moments using a Bag-of-Words Approach and Related Ethical Discussions. In 2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC) (Vol. 1, pp. 653-662). IEEE.
- Roushan, T., Adib, R., Johnson, N., George, O., Hossain, M. F., Franco, Z., ... & Ahamed, S. I. (2019, July). Towards Predicting Risky Behavior among Veterans with PTSD by Analyzing Gesture Patterns. In 2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC) (Vol. 1, pp. 690-695). 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.

Selected Posters

- 'Outcomes of Use of Antipsychotic for Delirium in the ICU: A Big Data Approach', presented in 2019 American Thoracic Society International Conference, Dallas, TX.
- 'mHealth family self-management intervention for parents of transplanted children: Preliminary results'" presented in 2019 14th International Family Nursing Association Annual Meeting, Washington, D.C.
- 'mTEH: A Decision Support System for Tele-ophthalmology to Improve Eye Health of Wisconsin Population in Community Settings', presented in 2019 4th IEEE/ACM Conference on Connected Health (CHASE'19), Washington, D.C.
- 'E-BAP: A scalable and flexible web-based software system to support self-management for behavior changes', presented in 2019 IEEE International Conference on Biomedical and Health Informatics (BHI'19), Chicago, IL.
- 'MARQUECare: Information Technology Tools and a System for Palliative Care for Everyone', presented in 2019 Healthy People on a Healthy Planet Conference, Milwaukee, WI.

Co-curricular

-  **Film-making**
General Secretary, BUET Film Society
Oct 2014 - May 2015
-  **Music**
Performed in multiple music shows,
3rd position in Inter Cadet College
Literary and Music Meet, 2008
-  **Basketball**
Part of Champion team in Inter
hall Basketball Competition, BUET,
Runner-up, 2014, Champion, 2015

References

- Dr. Sheikh Iqbal Ahamed**
Professor and Chair, Dept. of Computer
Science, Marquette University
 sheikh.ahamed@marquette.edu
- Dr. Mohammad Adibuzzaman**
Assistant Director, Data And Computing,
Regenstrief Center for Healthcare Engineering,
Purdue University
 madibuzz@purdue.edu