# Md. Aquib Azmain

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**ResearchGate**: researchgate.net/profile/Md-Azmain



#### **Education**

Degree	Institution	Group/Major	Result	Year
Master of Science in Software Engineering	Institute of Information Technology, University of Dhaka	Software Engineering	CGPA 3.58 out of 4.00	2019 to 2020
Bachelor of Science in Software Engineering	Institute of Information Technology, University of Dhaka	Software Engineering	CGPA 3.89 out of 4.00	2015 to 2018
HSC	Government Azizul Haque College, Bogura	Science	GPA 5.00 out of 5.00	2014
SSC	Bogra Cantonment Public School and College, Bogura	Science	GPA 5.00 out of 5.00	2012

## **Professional Experience**

- 1. **Lecturer**, CSE at BRAC University (Feb 2021-Present):
  - Conducted theory, lab classes and workshops. Created and implemented assignments, quiz and other assessments. Courses Taught:
    - Numerical Methods CSE330
    - System Analysis and Design CSE471
- 2. Adjunct faculty, CSE at Independent University, Bangladesh (September 2021-Present):
  - Conducted both theory and lab classes. Created and implemented quizzes, lab assignments and other assessments. Courses Taught: Data Structure - CSE203
- 3. **Short Course Instructor** at IIT, University of Dhaka (Aug 2018-Jan 2021):
  - o Provided clear, informative lectures on web programming, web design and smart office.
  - o Created and implemented written and oral assessments (Lab exams, presentations).
- 4. Software Engineer Intern at SELISE Rockin' Software, Dhaka (Jan 2018-Jun 2018):
  - o Engaged in software development utilizing wide range of technological tools.
  - Wrote code on Angular 6 and C#.
- 5. **Requirement Analyst** at Glitra Bangladesh, Dhaka (Jul 2017-Dec 2017):
  - Conducted requirement analysis for a software "Digital Letter" of Department of Military Lands & Cantonments

### **Awards and Fellowship**

- "ICT Fellowship 2019-20" for the purpose of Master's thesis from ICT Division, Bangladesh
- Secured the position of first runners up at "Cybernauts 2018 Project Showcasing" By NSUCEC. Link: http://www.iit.du.ac.bd/view\_achievements/view\_achievements details/51
- Secured the position of second runners up at "**Technival 2018 Project Showcasing**" by KUET. Link: <a href="http://www.iit.du.ac.bd/view">http://www.iit.du.ac.bd/view</a> achievements/view achievements details/52
- Secured the position of second runners up at "BUET CSE Fest Inter University Project Show 2018". Link: <a href="http://www.iit.du.ac.bd/view">http://www.iit.du.ac.bd/view</a> achievements/view achievements details/53
- Board Merit Scholarship and full tuition waiver in the undergraduate study at the University of Dhaka, Bangladesh for excellence in H.S.C Examination, 2014, Rajshahi Board.

### **Publications**

- 1. "Automated Repair of Asymmetric Web Pages during Resolution of Mobile Friendly Problems", Md. Aquib Azmain, Kishan Kumar Ganguly. The 16th International Conference on Evaluation of Novel Approaches to Software Engineering, ENASE 2021. [PDF]
- 2. "Impact of label noise and efficacy of noise filters in software defect prediction", Shihab Shahriar Khan, Md. Aquib Azmain, Nishat Tasnim Niloy, and Ahmedul Kabir. The 32nd International Conference on Software Engineering and Knowledge Engineering, SEKE 2020, USA, pages 347-352. [PDF]
- 3. "On the Evolutionary Properties of Fix Inducing Changes", Syed Fatiul Huq (Sujoy), Md. Aquib Azmain, Nadia Nahar and Md. Tawhid, QuASoQ 2020 in conjunction with the 27th Asia-Pacific Software Engineering Conference (APSEC 2020). [PDF]

## **Research Experience**

- A machine learning-based inference and analysis of crop production based on climate parameters
  in Bangladesh: Using standard approaches of machine learning this study provides appropriate
  prediction models for all the crops considered and infers the numeric effect of various climate
  factors on the unit production of the crops.
- Improving symmetric structure during resolution of mobile friendly problems in web pages: Mobile friendly problem (MFP) causes the low quality of the website visibility and has a potential risk to decrease usability for a mobile user. The solution proposed an automatic repair technique that generates symmetric mobile friendly patches for a web page.
- On the evolutionary properties of fix inducing changes: Analyzing Fix-Inducing Changes (developer
  code that introduce bugs) provides the opportunity to estimate bugs beforehand. This study
  analyzes the evolution of FICs to visualize patterns associated with the introduction of bugs
  throughout and within project releases.
- Noise filters in software defect prediction: By using a diverse set of classifiers, imbalance-methods
  and noise filters, this study empirically investigates how the presence of label noise in post-release
  defect prediction datasets affect performance and evaluates the effectiveness of noise filters in
  minimizing the adverse effects of noise.
- Towards the detection and refactoring of message chains: This study proposes a method of detecting and suggesting the refactoring for Message Chains (a code smell).

#### **Skills and Certification**

- Excel Skills for Business by Macquarie University on Coursera. Certificate earned on October 26, 2020. Link: https://coursera.org/share/3fd909e291c3bd124fada8fed573e717
- **Programming skills**: Python, Java, C++, C
- Web based skills: Angular, PHP, MySQL, Flask, Javascript
- Data science skills: Python, SQL, R, Data Visualization, Machine Learning, Documentation, DBMS
- Tools: TensorFlow, Git, Jira, RStudio, MS Excel, Power BI, IBM Watson, MATLAB
- **IBM Data Science Professional Certificate** by IBM on Coursera. Certificate earned at November 29, 2020. Certificate Link: <a href="https://coursera.org/share/ded2601302dd0669b44a89fbd33cca06">https://coursera.org/share/ded2601302dd0669b44a89fbd33cca06</a>
- **Python Certificate** by HackerRank. Certificate earned at September 21, 2020. Link: <a href="https://www.hackerrank.com/certificates/9b1986c56db8">https://www.hackerrank.com/certificates/9b1986c56db8</a>
- **TensorFlow Developer Professional Certificate** by DeepLearning.Al on Coursera. Earned at October 14, 2020. Link: https://coursera.org/share/16b8288d4058bff7e67b85033d3ac1f8

### **Additional Activities**

- 1. Web Designer, Training Workshop on DevOps 2019, IIT, DU
  - A workshop on DevOps has been organized by the DSSE (Distributed Systems & Software Engineering) Student Research Group on 3rd and 4th August. I developed the website for this workshop.
- 2. Volunteer at National High School Programming Contest 2016 (Dhaka Regional)
  - NHSPC 2016 (Dhaka Regional) junior division contest was held in Institute of Information Technology, University of Dhaka. My job was to give technical support to the participants.
- 3. Event Organizer, IIT, DU Industry Academia Collaboration 2017 (with 10 leading companies)
  - Institute of Information Technology (IIT) of the University of Dhaka held its first ever Industry Academia Collaboration Session on 5th August 2017. I was a member of the organizing committee.

#### References

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