

Sabiha Salma

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RESEARCH INTEREST

Human Computer Interaction, Software Engineering, AI for Software Engineering, AI for Education

EDUCATION

MS in Computer Science, George Mason University	2024
Thesis Advisor: Dr. Kevin Moran	
BS in Computer Science, University of Dhaka	2014
Thesis Advisor: Dr. Shaily Kabir	

RESEARCH EXPERIENCE

Ongoing Collaborative Research, George Mason University	Fall 2025 – Present
Title: The Impact of Agentic AI-based Time Management Tools on Students Academic Success	
<i>Faculty Members:</i> Dr. Zhichong Lu, Dr. Ghada Adam Abdelmoumin, Dr. Shahnaz Kamberi	
Graduate Research Assistant, Sage Lab	Summer 2021 – Summer 2024
Projects: Software Evolution, Principles of Ethical Software Design, Exploration of LLMs for Software Testing	
<i>Advisor:</i> Dr. Kevin Moran	
Independent Research Study, George Mason University	Spring 2021
Title: Human-Computer Interaction for Building User Interfaces	
<i>Advisor:</i> Dr. Kevin Moran	
Data Science Research, University of Dhaka	Fall 2015 – Summer 2016
Title: Monitoring Student Engagement through a Video based Learning Platform	
<i>Advisor:</i> Dr. Amin Ahsan Ali	

PUBLICATIONS

1. **Sabiha Salma**, S M Hasan Mansur, Yule Zhang, and Kevin Moran, “GuiEvo: Automated Evolution of Mobile App UIs”, in proceedings of the 21st International Conference on Mining Software Repositories (MSR 2024), Lisbon, Portugal, April 15th-16th, 2024.
2. Kesina Baral, Jack Johnson, Junayed Mahmud, **Sabiha Salma**, Mattia Fazzini, Julia Rubin, Jeff Offutt, and Kevin Moran, “Automating GUI-based Test Oracles for Mobile Apps”, in proceedings of the 21st International Conference on Mining Software Repositories (MSR 2024), Lisbon, Portugal, April 15th-16th, 2024.
3. S M Hasan Mansur, **Sabiha Salma**, Damilola Awofisayo, Kevin Moran (2022). AidUI: Toward Automated Recognition of Dark Patterns in User Interfaces. In The 45th IEEE/ACM International Conference on Software Engineering (ICSE 2023), Melbourne, Australia, May 14th-20th, 2023.
4. Shahnila Zaman, **Sabiha Salma**, Shaily Kabir. Efficient Grouping of Tourism Webpages Considering Ratings and Reviews. International Journal of Computer Science, Information Technology, and Security (ISSN 2249-9555), vol.4, no.3, pp.55-60, 2014.

PROFESSIONAL SERVICES

Junior Program Committee

- 22nd International Conference on Mining Software Repositories (MSR 2025)
- 21st International Conference on Mining Software Repositories (MSR 2024)

External Reviewer

- 47th International Conference on Software Engineering (ICSE 2025)
- 45th International Conference on Software Engineering (ICSE 2023)
- 30th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2023)

- 37th IEEE/ACM International Conference on Automated Software Engineering (ASE 2022)
- 29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2022)
- 29th IEEE/ACM International Conference on Program Comprehension (ICPC 2021)
- 18th Mining Software Repositories (MSR 2021)

Co-Reviewer

- 19th Mining Software Repositories (MSR 2022))

TEACHING EXPERIENCE

Graduate Teaching Assistant, George Mason University Fall 2018 – Spring 2021, Fall 2024 - Present

Courses: Object Oriented Programming, Data Structures, Software Engineering for World Wide Web

- Led a team of TAs to ensure cohesive collaboration, and proper evaluation and assessment of student projects.
- Facilitated interactive learning environments through lab sessions
- Provided personalized assistance to students during regularly scheduled in-person and virtual office hours

Lecturer (Instructor of Record), State University of Bangladesh Summer 2017 – Spring 2018

Courses: Algorithms, Automata Theory, Image Processing, Discrete Mathematics, Programming Fundamentals

- Formulated engaging lesson plans, led lab sessions, and assessed student performance in exams and projects
- Offered guidance and mentorship to students, addressing academic concerns and providing career advice
- Organized programming contests

Lecturer (Instructor of Record), The Millennium University Bangladesh Fall 2016 - Spring 2017

Courses: Image Processing, Discrete Mathematics

- Assessed student performance providing detailed feedback to support academic growth

HONORS & AWARDS

Outstanding Graduate Teaching Assistant Award, George Mason University	2021
Distinguished Graduate Teaching Assistant Award, George Mason University	2020
Summer Research Initiation Award, George Mason University	2020
CRA-W Grad Cohort 2020 Travel Award, Computing Research Association for women	2020
ICT Fellowship, Bangladesh Government (equivalent of NSF Graduate Research Fellowship)	2016
National Education Board Scholarship, National Education Board of Bangladesh	2015, 2007

ACADEMIC AFFILIATIONS

Association for Computing Machinery (ACM)	2021 – Present
Bangladeshi Graduate Students Association (BDGSA), George Mason University	2018 – Present
Ahmadiyya Muslim Student Association for Women (AMSAW), George Mason University	2018 – Present

TECHNICAL SKILLS

Languages: Python, Java, C, SQL, HTML5, CSS3

Developer Tools & Frameworks: Android Studio, Jupyter Notebook, Eclipse, Git, JUnit

Libraries: Keras, TensorFlow, Scikit-Learn, Pandas, NumPy, Matplotlib

Documentation System: LaTex

REFERENCES

Associate Professor Elizabeth White
Department of Computer Science
School of Computing, George Mason University
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Fairfax, VA 22030, USA
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Assistant Professor Kevin Moran
Department of Computer Science
University of Central Florida
Room 217A, L3Harris Engineering Center
Orlando, FL 32816, USA
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Phone: (407)-823-3219