

Sabiha Salma

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RESEARCH INTEREST

Software engineering, mobile software development, machine learning applications to software engineering, software interface design, human-computer interaction

EDUCATION

George Mason University

Ph.D., Computer Science

Concentration: HCI Design Considerations for User Interface Development Tools

Advisor: Dr. Kevin Moran

Fairfax, VA

Aug. 2018 – Present

University of Dhaka

B.S., Computer Science

Advisor: Dr. Shaily Kabir

Bangladesh

Apr. 2014

RESEARCH EXPERIENCE

Independent Research Study

George Mason University

- Title: Human-Computer Interaction for Building User Interfaces
- Advisor: Dr. Kevin Moran

Fairfax, VA

Jan. 2021 – Present

Summer Research

George Mason University

- Title: Generating Libraries of Novel Fragment Configurations to Aid De-Novo Protein Structure Prediction
- Advisor: Dr. Amarda Shehu

Fairfax, VA

May 2020 – Aug. 2020

Ph.D. Introductory Research

George Mason University

- Title: How Programming Tools Support Developers
- Advisor: Dr. Thomas LaToza

Fairfax, VA

Jan. 2019 – May. 2019

Data Science Research

University of Dhaka

- Title: Monitoring Student Engagement through a Video based Learning Platform
- Advisor: Dr. Amin Ahsan Ali

Bangladesh

Aug. 2015 – July 2016

TEACHING EXPERIENCE

Graduate Teaching Assistant

George Mason University

- Assigned courses: Data Structures using Java, Object Oriented Programming in Java
- Responsibilities: conducting lab sessions, holding office hours, designing jUnit testers, grading projects

Fairfax, VA

Aug. 2018 – Present

Lecturer

State University of Bangladesh

- Assigned courses: Image Processing, Discrete Mathematics, Programming Fundamentals
- Responsibilities: preparing lesson plans, grading exams and projects, conducting lab sessions, advising students, organizing programming contests

Bangladesh

May 2017 – May 2018

The Millennium University

- Assigned courses: Data Structures using Java, Object Oriented Programming in Java
- Responsibilities: preparing lesson plans, grading exams and projects, conducting lab sessions, advising students

Aug. 2016 – Jan. 2017

Lab Assistant

Holy Cross College

- Assigned course: Botany
- Responsibilities: conducting lab sessions, assisting students with directed guidelines

Bangladesh

July 2008 – Sep. 2008

SELECTED AWARDS

Summer Research Initiation Award	2020
<ul style="list-style-type: none">Awarded by Computer Science department, Volgenau School of Engineering, George Mason University	
Distinguished Graduate Teaching Assistant Award	2020
<ul style="list-style-type: none">Awarded by Computer Science department, Volgenau School of Engineering, George Mason University	
CRA-W Grad Cohort 2020 Participation and Travel Grant	2020
<ul style="list-style-type: none">Awarded by Computing Research Association for women for the two-day grad cohort	
Ph.D. Fully Funded Scholarship	2018
<ul style="list-style-type: none">Awarded by Computer Science department, Volgenau School of Engineering, George Mason University	
ICT Fellowship	2016
<ul style="list-style-type: none">Awarded by the Ministry of Posts, Telecommunications and IT, Government of Bangladesh	
National Education Board Scholarship	2015, 2007
<ul style="list-style-type: none">Awarded by National Education Board of Bangladesh	

SELECTED PROJECTS

Mechanisms of Action Prediction <i>Python</i>	Nov. 2020
<ul style="list-style-type: none">It was a Kaggle competition for predicting the mechanisms of actions (MoA) of drugsDone in collaboration as a course requirement of CS584 Theory and Applications of Data MiningDetailed description is available on GitHub	
GolpoGujob <i>Node.js, Express.js & SocketIO</i>	Aug. 2020 – Dec. 2020
<ul style="list-style-type: none">Designed and developed a real-time chat applicationDemonstrated different learned concepts of prototype development, heuristic evolution, interaction design iteration, usability evolution and visual design iterationDone in collaboration as a course requirement of SWE632 User Interface Design & DevelopmentDetailed description is available on GitHub	

ACADEMIC AFFILIATIONS

Association for Computing Machinery (ACM)	Apr. 2021 – Present
<ul style="list-style-type: none">Student member, George Mason University	
Bangladeshi Graduate Students Association (BDGSA)	Aug. 2018 – Present
<ul style="list-style-type: none">Student member, George Mason University	
Ahmadiyya Muslim Student Association for Women (AMSAW)	Aug. 2018 – Present
<ul style="list-style-type: none">Student member, George Mason University	

TECHNICAL SKILLS

Languages: Python, Java, C, SQL, JavaScript, HTML5, CSS3
Frameworks: Node.js, JUnit, WordPress
Developer Tools: Jupyter Notebook, Eclipse, Git, Atom, IntelliJ, Netbeans, Visual Studio, Weka
Libraries: Keras, TensorFlow, Scikit-Learn, Pandas, NumPy, Matplotlib
Documentation System: LaTeX