




Md Rayhanur Rahman

Doctoral Student

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Education

Ph.D. | Computer Science | North Carolina State University |
2018-Present (Expected graduation: May'23) | 3.83/4.0

Masters | Software Engineering | University of Dhaka | 2013-2014 | 3.98/4.00

Bachelor | Software Engineering | University of Dhaka | 2009-2012 | 3.96/4.00

Skills

Languages: C#, Java, Python, MSSQL, R
WebDev : HTML, CSS, JS, JQuery, knockoutjs, Nodejs, ASP.NET MVC, CodeQL, KQL
Research related: Machine learning, Natural language processing, Graph Machine Learning
Cybersecurity: MITRE ATT&CK
Other: Linux, Latex, Git

Extra-Curricular

Champion, GetRoot Byteknigh Cyber Security Challenge Competition - OWASP Bangladesh, 2012 | Finalist - .NET Track, BASIS Code Warriors Challenge, 2012 | Finalist, Microsoft Imagine Cup Bangladesh Software Competition, 2012

Awards

Innovation Fund, Ministry of ICT, Government of Bangladesh, 2014-15 for State of the Art Mobile App Testing Framework in the Cloud | National Science and Technology (NST) Fellowship, Ministry of Science and Technology, Government of Bangladesh, 2013-14

Work Experience and Internships

Aug'18 - Research Assistant NC State University
I am working as a RA under Dr. Laurie Williams. My research focuses on understanding attack patterns of multi-stage cyberattacks towards formulating detection and mitigation strategies

Summer'21 Instructor NC State University
Took C and Software Tools undergraduate course

Summer'20 Research Intern Microsoft
I have worked with 1ES team to analyze and investigate how the security tools can be improved through the usage data analysis and developer survey

Sep'14 Lecturer University of Dhaka
I took various courses in undergraduate program such as Discrete Math, Object Oriented Programming etc

Research Publications

Oct'22 What are the attackers doing now? Automating cyberthreat intelligence extraction from text on pace with the changing threat landscape: A survey ACM Computing Survey

Mar'22 Why secret detection tools are not enough: An industrial case study Empirical Software Engineering Journal

Sep'20 A Literature Review on Mining Cyberthreat Intelligence from Unstructured Texts ICDM 2020

Jun'20 Security Smells in Infrastructure as Code Scripts ACM TOSEM

May'19 Share but beware: Security Smell in Python Gists ICSME'19

Projects

Current Mining attack path from cyberthreat intelligence reports and prioritizing security controls based on the patterns

Aug'20 Identifying software security activities in Github repositories using NLP

Dec'19 One Page Resume Website Builder Bot for Slack

Dec'18 Spark RDD to Dataframe API converter

Dec'18 Scalable VFDT Implementation for Software Defect Prediction

Jan'15 Click2Dial Microsoft Outlook Extension

Contribution

Oct'20 - Serving as a mentor in Erevna Research Fellowship

2019 - Served as internal/sub reviewer for ICSE'21, ICSE'20, MSR'20, ESEM'20