




Md Rayhanur Rahman

Ph.D. Candidate

 mrahman@ncsu.edu
 +9196497823
 rayhanur-rahman.github.io

Education

Ph.D. Candidate | Computer Science |
North Carolina State University |
2018-Present (Expected graduation:
Dec'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

Research: Scientific writing,
qualitative research, meta analysis
Analysis: Natural language
processing, machine learning, graph
machine learning, social network
analysis
Cybersecurity: Threat intelligence,
security control, threat analysis,
MITRE ATT&CK
Software engineering: ASP.NET,
Python, Javascript, Web development,
Git, CodeQL, Kusto, MSSQL
Others: Public procurement, writing
for grants/funds, software service
architecture design

Extra-Curricular

Champion, GetRoot & Byteknight
Cybersecurity Competition - OWASP
Bangladesh, 2012 | Finalist - BASIS
Code Warriors Challenge, and
Microsoft Imagine Cup Bangladesh
Software Competition, 2012

Awards

Innovation Fund, Ministry of ICT,
Bangladesh, 2014-15 | National
Science and Technology Fellowship,
Ministry of Science and Technology,
Bangladesh, 2013-14 | United Grants
Commissions, Bangladesh Research
Fund 2016-17

Work Experience

Aug'18 - Research Assistant NC State University
I am working as a RA under Dr. Laurie Williams. My research fo-
cuses 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 se-
curity 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
May'24 Software Engineer Kaz Software Ltd.
I Built a semantic ontology management for enterprise assets, a blog
engine using WPF, a web based piano composer named Groovybeats
using Kinectjs. Worked as a team member in Orbitax project

Research Publications

In-progress An investigation of security controls and MITRE ATT&CK techniques
In-progress Investigating co-occurrences of MITRE ATT&CK Techniques
Oct'22 What are the attackers doing now? Automating cyberthreat in-
telligence 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
Jun'20 Security Smells in Infrastructure as Code Scripts ACM TOSEM
Mar'20 Do Configuration Management Tools Make Systems More Secure? An
Empirical Research Plan HotSos 2020
May'19 Share but beware: Security Smell in Python Gists ICSME'19

Projects

Current Mining attack path from cyberthreat intelligence reports and priori-
tizing 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
May'12 IITDURMS - Result Management System for IIT, University of Dhaka
May'10 Greenflash - Behavioral based Malware Protection System for USB
Drives

Contribution

Oct'20 Served as a mentor in Erevna Research Fellowship
2019 - Served as internal/sub reviewer for ICSE'21, ICSE'20, MSR'20,
ESEM'20