# Md Rayhanul Masud

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### **EDUCATION**

# University of California Riverside (UCR)

Sep 2021 - Present

PhD in Computer Science

Bangladesh University of Engineering and Technology (BUET)

Apr 2012 - Feb 2017

BSc in Computer Science and Engineering

## WORK EXPERIENCE

# Graduate Student Researcher University of California, Riverside

Jul 2022 - Present

- Current research on User Disambiguation across security forums and Open Source Software Platforms
- Developed frontend of SourceFinder which provides access to the largest database of malware GitHub repositories

  [Python] [C++] [spaCy] [Pandas] [ReactJS]

# Application Developer BGD e-GOV CIRT, Bangladesh

Jul 2020 - Aug 2021

- Contributed to the frontend of Boithok, a Video Conferencing Platform used by several ministries of Bangladesh
- Automated server deployment which reduced the downtime of the system
- Added new feature of downloading meeting attendance report which minimized the manual overhead

 $\begin{bmatrix} \text{Jitsi-Meet} \end{bmatrix} \begin{bmatrix} \text{ReactJS} \end{bmatrix} \begin{bmatrix} \text{Python} \end{bmatrix} \begin{bmatrix} \text{Docker} \end{bmatrix} \begin{bmatrix} \text{Bash} \end{bmatrix}$ 

# Software Engineer Kona Software Lab Ltd, Bangladesh

Jul 2018 - Jul 2020

- Contributed to the development of transaction management pipeline of Kona Blockchain Platform
- Introduced new mechanism of template based smart contract deployment to prevent insecure transaction requests
- Developed a PoC of Real Estate Management System based on Kona Blockchain Platform
- Implemented lottery service interface Module of a Lottery Game Management System

Ethereum Solidity Java Spring Boot

#### Research Interests

Cyber Security, Machine Learning, Data Mining, and Natural Language Processing

## **PUBLICATIONS**

- 1. B. Treves, M.R. Masud, M. Faloutsos, "URLytics: Profiling Forum Users from their Posted URLs", International Conference on Advances in Social Network Analysis and Mining, 2022

  PDF Link
- Developed a URL based user profiling mechanism to extract maximal information about the user
- 2. M. O. F. Rokon, R. Islam, M.R. Masud, M. Faloutsos, "PIMan: A Comprehensive Approach for Establishing Plausible Influence among Software Repositories", International Conference on Advances in Social Network Analysis and Mining, 2022

  PDF Link
- Proposed a graph and embedding based approach to analyze the influence among the software repositories

## Academic Projects

# Diving deeper into Popularity of GitHub Repositories | Python, Pandas, Plotly, Matplotlib

Link

- Explored the popularity of GitHub repositories based on author and repository centric features
- Created a user-follower network of 7.5k GitHub users and used HITS algorithm to describe the influence on popularity

# User Profile Matching Analysis across Heterogeneous Online Platforms | Python, NLTK

 $\mathbf{Link}$ 

- Developed a model to match user profiles based on user generated contents
- Experimented over 1094 threads including 62655 comments from 4 different subreddits

# TECHNICAL SKILLS

Programming Languages Python, Java, C++, JavaScript, Matlab

Frameworks and Packages Spring Boot, ReactJS, Scikit-learn, NLTK, PyTorch, TensorFlow

Visualization Plotly, Matplotlib, Seaborn, Tableau

Database MySQL, NoSQL, PostgreSQL

Others AWS, Docker, Hadoop, PySpark, HTML/CSS, JQuery, JSON, REST, Git