

**Education** 

**North Carolina State University** 

Ph.D. IN COMPUTER SCIENCE

Raleigh, NC

Aug. 2017 - Present

**North Carolina State University** 

M.S. IN COMPUTER SCIENCE

Raleigh, NC

(Expected) Dec. 2019

**Bangladesh University of Engineering & Technology** 

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Dhaka, Bangladesh

Mar. 2017

Raleigh, NC Aug. 2017 - Present

May 2019 - Aug 2019

**Experience** 

**North Carolina State University** 

GRADUATE RESEARCH ASSISTANT

• Research topics span software engineering and security

- Conducted qualitative and quantitative empirical studies and hypotheses testing
- Collaborated with researchers from Microsoft and Rochester Institute of Technology

Microsoft Research Redmond, WA

RESEARCH INTERN

- Researching why developers bypass security alerts on exposed credentials in source code
- Conducted interviews and surveys to understand developer behavior
- · Analyzed usage data to identify factors that affect developers' decision to bypass security alerts

**Publications** 

Conference Paper [Peer-reviewed]

How Do Developers Act on Static Analysis Alerts? An Empirical Study of Coverity Usage

ISSRE '19

Berlin, Germany

IMTIAZ, N.; MURPHY, B.; WILLIAMS, L.

- In Proceedings of the 30th International Symposium on Software Reliability Engineering
- Out of 134 submissions, 42 papers were accepted (an acceptance rate of 31%)

# Synthesizing Program Execution Time Discrepancies in Julia Used for Scientific Software

ICSME '19

Farhana, E.; **Imtiaz, N.**; Rahman, A.

• In Proceedings of the International Conference on Software Maintenance and Evolution

**Investigating the Effects of Gender Bias on GitHub** 

ICSE '19

Cleveland, Ohio

 $\textbf{Imtiaz}, \textbf{N.}; \\ \textbf{MIDDLETON}, \textbf{J.}; \\ \textbf{CHAKRABORTY}, \textbf{J.}; \\ \textbf{ROBSON}, \textbf{N.}; \\ \textbf{Bai}, \textbf{G.}; \\ \textbf{AND MURPHY-HILL}, \textbf{E.} \\ \textbf{MIDDLETON}, \textbf{J.}; \\ \textbf{CHAKRABORTY}, \textbf{J.}; \\ \textbf{ROBSON}, \textbf{N.}; \\ \textbf{Bai}, \textbf{G.}; \\ \textbf{AND MURPHY-HILL}, \textbf{E.} \\ \textbf{MIDDLETON}, \textbf{J.}; \\ \textbf{CHAKRABORTY}, \textbf{J.}; \\ \textbf{ROBSON}, \textbf{N.}; \\ \textbf{MIDDLETON}, \textbf{J.}; \\ \textbf{CHAKRABORTY}, \textbf{J.}; \\ \textbf{ROBSON}, \textbf{N.}; \\ \textbf{MIDDLETON}, \textbf{MIDDLETON}, \textbf{J.}; \\ \textbf{CHAKRABORTY}, \textbf{J.}; \\ \textbf$ 

Montreal, Québec

- In Proceedings of the 41st ACM/IEEE International Conference on Software Engineering
- Out of 529 submissions, 109 papers were accepted (an acceptance rate of 21%)

#### **Challenges with Responding to Static Analysis Tool Alerts**

IMTIAZ, N.; RAHMAN, A.; FARHANA, E.; WILLIAMS, L.

MSR '19 Mining Challenge

Montreal, Québec

- In Proceedings of the International Conference on Mining Software Repositories (MSR) 2019
- Out of 27 submissions, 14 papers were accepted (an acceptance rate of 52%)

### Snakes in Paradise?: Insecure Python-related Coding Practices in Stack Overflow

Rahman, A.; Farhana, E.; **Imtiaz, N.** 

• In Proceedings of the International Conference on Mining Software Repositories (MSR) 2019

• Out of 27 submissions, 14 papers were accepted (an acceptance rate of 52%)

MSR '19 Mining Challenge

Montreal, Québec

### Workshop Papers + Posters [Peer-reviewed]

# Sentiment and Politeness Analysis Tools on Developer Discussions Are Unreliable, but so Are People.

SEmotion '18

IMTIAZ, N.; MIDDLETON, J.; GIROUARD, P.; AND MURPHY-HILL, E.

Gothenburg, Sweden

• In Proceedings of the Third International Workshop on Emotion Awareness in Software Engineering, 2018

### A Synopsis of Static Analysis Alerts On Open Source Software

HotSoS '19 Poster

IMTIAZ, N.; WILLIAMS, L.

Nashville, Tennessee

• In Proceedings of the Symposium and Bootcamp on the Science of Security (HotSoS) 2019

Best poster award

## Honors & Awards

2019	Best Poster Award, HotSoS	Nasheville, TN
2017-18	Recipient, NCSU College of Engineering (COE) GRA	Raleigh, NC
2016	Selected for Two-week Study Trip, Huawei Seeds for the Future	Beijing & Shenzhen, China

## Services

2020	ICSE, Sub-reveiewer	
2020	ESEM, Sub-reveiewer	
2019	XP, Sub-reveiwer	
2019	ICST, Sub-reveiwer	
2017	VL/HCC, Student Volunteer	Raleigh, NC

## Mentorship \_\_\_\_\_

## **Science of Software (SoS) Research Experience for Undergraduates**

Raleigh, NC

2018

- MENTORED 2 UNDERGRAD STUDENTS ON THEIR SUMMER RESEARCH PROJECTS

   Neill Robson, North Carolina State University
- Project: Impact of "Code of Conduct" on Gender Diversity in Open Source
  Tyler Percario, University of Lynchburg
- Tyler Percario, University of Lynchburg
   Project: Comparison of Code Quality between Male and Female Developers

# Technical Skills\_\_\_\_\_

#### **Programming Languages**

 ${\tt PYTHON, JAVA, SQL, C/C++, R, Shell, Selenium, Latex, HTML, Azure \, Kusto}$ 

#### **Research Methods**

Qualitative & Quantitative Analysis, Survey, Statistical Models, Hypotheses Testing

# **School Projects**

Task Tracker Bot GitHub repo

CONNECTS SLACK AND TRELLO PLATFORM OF A TEAM FOR EFFICIENT TASK MANAGEMENT

2017

presentation video

Prototxt2TensorFlow GitHub repo

CONVERTS NEURAL NETWORKS DEFINED IN PROTOTXT FORMAT TO EQUIVALENT TENSORFLOW CODE IN PYTHON

2018