NASIF IMTIAZ

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SUMMARY

I am a Ph.D. student with a research focus on software engineering and software security. My research work primarily involves mining software repository data and security analysis of open source projects to characterize the security best practices. I am looking for Summer'21 internship opportunities in Software Engineering, Data Science, or Research positions.

EDUCATION

North Carolina State University (NCSU), Raleigh, NC

Aug 2017 - May 2022 (Expected)

Ph.D. in Computer Science - Specialization in Software Engineering

GPA 3.63/4.00

Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

May 2012 - Feb 2017

B.Sc. in Computer Science and Engineering

GPA 3.64/4.00

NCSU

EXPERIENCE

Research Intern

Graduate Research Assistant

August 2017 - Present

DLF, RealSearch Lab

May 2019 - Aug 2019

One Engineering Systems

Microsoft Research

TECHNICAL SKILLS

- Languages: Python, Java, SQL, R, C/C++, Unix Shell, Latex, HTML, Azure Kusto
- Tools: Git, Notebooks, Pandas, NumPy, SciPy, Matplotlib, Scikit-learn, Selenium, MySQL
- Research Methods: Qualitative & Quantitative analysis, Open coding, Interviews & Survey, Exploratory data analysis, Statistical models, Hypothesis testing, Security testing
- Data Science: Feature selection, Principal component analysis, Missing data & imputation, Supervised models

SELECTED PUBLICATIONS

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

Oct 2019

Nasif Imtiaz, Brendan Murphy, Laurie Williams

Berlin, Germany

Proceedings of the 30th International Symposium on Software Reliability Engineering (acceptance rate: 31%)

Investigating the Effects of Gender Bias on GitHub

May 2019

Nasif Imtiaz, Justin Middleton, Joymallya Chakrabarty, Neil Robson, Gina Bai, Emerson Murphy-Hill

Montreal, Quebec

• In Proceedings of the 41st ACM/IEEE International Conference on Software Engineering (acceptance rate: 21%)

PROJECTS

Vulnerable Dependencies

Aug 2019 - Present

Research Project, RealSearch Lab

NCSU

• Studying vulnerable dependency detection tools to identify current gaps; GitHub project

Developer Adoption of Security Tools

Aug 2018 - Aug 2020

Research Project, RealSearch Lab

NCSU

- Analyzed the fix rate and fix complexity for Coverity alerts from historical data; GitHub project
- Studied StackOverflow posts to categorize developer challenges in responding to static analysis alerts
- Published two conference papers; Collaborated with Microsoft and RunSafe Security

Gender Bias in Open Source

Aug 2017 - Aug 2018

NCSU

Research Project, Developer Liberation Front (DLF)

- Analyzed GitHub data and tested several hypotheses derived from social studies to investigate effects of gender bias in open source software development
- Mentored two Research Experience for Undergraduate (REU) students
- Published one workshop and one conference paper

RELEVANT COURSES - GRADUATE LEVEL

Software Engineering, Software Testing, Compiler Construction, Artificial Intelligence, Foundations of Data Science, Automated Learning and Data Analysis, User Experience.

AWARDS

- Best poster at HotSoS'19
- NCSU CoE Fellowship for 2017-18
- Winner at HUAWEI Seeds for the Future'16 from Bangladesh

REFERENCES

- Dr. Laurie Williams, Distinguished Professor, North Carolina State University; PhD advisor.
- Emerson Murphy-Hill, Staff Research Scientist, Google; Former PhD advisor.