

# Mohammad Ishtiaq Ashiq Khan

CS PhD STUDENT AT VIRGINIA TECH

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Github: <https://github.com/Ashiq5>

Website: <https://ashiq5.pythonanywhere.com/>

## WORK

### EXPERIENCE

#### Graduate Research Assistant, Blacksburg, Virginia, USA

*Supervisor: Dr. Taejoong Chung*

- Currently involved in research related to security and data analysis

#### Lecturer at United International University, Dhaka, Bangladesh

*Department of CSE*

*Jul '19 - Jan '21*

- Taught Network Security, Artificial Intelligence Laboratory, Object Oriented Programming, etc.

#### Software Engineer at InfoSapex Limited, Dhaka, Bangladesh

*Department of Design and Development*

*Nov '18 - Jul '19*

- Developed and deployed a Procurement Management System (available here: [proinfo.lged.gov.bd](http://proinfo.lged.gov.bd))

## EDUCATIONAL QUALIFICATION

#### Virginia Tech, Blacksburg, Virginia, USA

*Ph.D., Computer Science and Applications*

**CGPA: 4.00/4.00 (Ongoing)**

*Jan' 21 - Present*

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

*Bachelor of Science, Computer Science and Engineering*

**CGPA: 3.83/4.00**

*Jul' 14 - Oct' 18*

#### Notre Dame College, Dhaka, Bangladesh

*Higher Secondary Certificate*

**GPA: 5.00/5.00**

*Jul' 11 - June' 13*

**GRE Verbal: 160 (86th Percentile), Quant: 169 (95th Percentile), AWA: 4.0 (57th Percentile)**

**TOEFL (108) Reading: 28, Listening: 30, Speaking: 24, Writing: 26**

## RESEARCH INTERESTS

Network Security and Measurement, Data Analysis, Machine Learning

## RESEARCH WORK

#### Measurement and Analysis of Automated Certificate Reissuance

*Supervisor : Dr. Taejoong Chung*

*May '20 - Nov '20*

## AND

## PUBLICATIONS

*Authors: Olamide Omolola, Richard Roberts, Md. Ishtiaq Ashiq, Taejoong Chung, Dave Levin, and Alan Mislove*

- In Proceedings of the Passive and Active Measurement Conference (PAM21), Virtual, Mar 2021

#### Domain Flux based DGA Botnet Detection Using Feedforward Neural Network

*Supervisor : Dr. Md. Shohrab Hossain*

*Jan '18 - Jul '19*

*Authors: Md. Ishtiaq Ashiq, Protick Bhowmick, Md. Shohrab Hossain and Husnu S. Narman*

- In IEEE Military Communications Conference (MILCOM), Norfolk, VA, USA, Nov 12-14, 2019

### Improving Ad Hoc Network of Flying Devices Using AODV Routing Protocol

Supervisor : Dr. Md. Shohrab Hossain

Sep '17 - Dec '18

- Worked on the implementation of a research proposal using Network Simulator 3

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#### ACADEMIC PROJECTS

#### A Study on Adversarial Training: Is adversarial training transferable in the text domain?

Supervisor : Dr. Bimal Viswanath

Mar '21 - Apr '21

- [GitHub Link](#)
- Framework: PyTorch

#### Experimenting with Web Honeypots: How robust is SNARE-TANNER?

Supervisor : Dr. Angelos Stavrou

Mar '21 - Apr '21

- Devised and demonstrated vulnerabilities for attackers to bypass detection in SNARE-TANNER framework, [details here](#).

#### Road Genie (2017)

- An android application to assist users get an optimal route considering 3 metrics: distance, time, and comfort

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#### COURSE PROJECTS

#### Emulation of a multi-threading CPU in NACHOS

Course: *Operating Systems*

2017

- Implemented multiprogramming, demand paging, and priority scheduling

#### End to end compiler for C language

Course : *Compiler*

2016

- Implemented 5 stages of compiler design (lexical analysis, syntax analysis, semantic analysis, optimization, code generation)

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#### SKILLS

**Languages:** Python, Java, C++, C, L<sup>A</sup>T<sub>E</sub>X, JavaScript, Assembly (x86)

**Framework:** Django Rest, Tensorflow, PySpark, PyTorch

**Database Management System:** SQL, PostgreSQL

**Other:** HTML, CSS, Bootstrap, jQuery, Android (basic), Redis (basic), NodeJS (basic), Apache (basic)

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#### AWARDS & ACHIEVEMENTS

Awarded **University Merit List Scholarship** for academic performance at BUET

Awarded **Dean's List Scholarship** for academic performance at BUET

Awarded **Dhaka Board SSC & HSC Scholarship** in 2011 & 2013 respectively