# Suha Sabi Hussain

PERMANENT ADDRESS Queens, New York CURRENT ADDRESS Atlanta, Georgia
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Experience Security Engineering Intern

May 2020 - Present

TRAIL OF BITS

-Developing a privacy testing suite for neural networks in Python

#### **Security and Privacy Research Assistant**

August 2019 - Present

GEORGIA INSTITUTE OF TECHNOLOGY: INSTITUTE FOR INFORMATION SECURITY & PRIVACY

- -Conducting and developing data analysis procedures for Safe Browsing API behavior
- -Researching relevant cases of Internet censorship and surveillance for threat modeling

## **Security Engineering Intern**

December 2019 - January 2020

TRAIL OF BITS

- -Contributed to the analysis of a cryptographic privacy vulnerability in Safe Browsing APIs
- -Built a web crawler, a NLP-based URL classifier, and a censorship test dataset for the threat modeling and simulation of a surveillance state scenario

# Security and Privacy Research Intern

June 2017 - June 2019

NYU CENTER FOR CYBERSECURITY

-Designed, implemented, and published a novel state-of-the-art machine learning-based and hardware-theoretic methodology to detect privacy violations in children's apps on the Android platform

<u>Honors and Awards</u>: Invited talk at the NSA - Board of Directors. IEEE TIFS Publication. ACM 1st Award. NSA-RD 1st "Science Security" Award. NYCSEF 1st Award. NYC JSHS SF 3rd.

-Developed, published, and presented a new method for the exploitation of speech recognition systems

<u>Honors and Awards</u>: Invited talk at the NSA - Research Directorate. C3E Workshop Presentation and Publication. Intel ISEF 2nd Award. Shanghai STEM Cloud Award. NSA-RD 2nd "Science Security" Award. GoDaddy Data Award. ACM 4th Award. NYCSEF 1st Award. Sarah and Morris Wiesenthal Award. Naval Science Award. NYU Tandon Press Release

#### **Hardware Engineering Intern**

June 2016 - August 2016

VENGO LABS

- -Contributed to rapid prototyping for product development, notably building a conveyor belt
- -Developed and documented various technical procedures and tools while troubleshooting issues

#### Involvement

#### **Robotics Software Engineer**

August 2019 - Present

ROBOJACKETS INTELLIGENT GROUND VEHICLE COMPETITION

- -Redesigned and deployed a semantic segmentation neural network for an autonomous vehicle
- -Training members in and developing educational materials for machine learning in robotics

### Education

#### **Georgia Institute of Technology**

August 2019 - December 2022

**B.S IN COMPUTER SCIENCE** 

- -Threads: People (Human-Computer Interaction) & Intelligence (Machine Learning)
- -Honors Program Living Learning Community Member
- -Relevant Coursework: Microelectronics and Nanotechnology. Privacy Technology, Policy and Law.

Human-Centered User Interface Design. Data Structures & Algorithms.

Certificates

Google igniteCS Bootcamp at Columbia University: Data Science

October 2017 - March 2018

Skills

General: Software Security Assurance, Machine Learning, Privacy Engineering, UI Design, Writing Languages: English (Native), Bengali (Fluent), Spanish (Intermediate), Arabic (Intermediate)

Technical Languages: Python, C, C++, Golang, Bash, x86 Assembly, LaTeX, Git

Machine Learning: PyTorch, Catalyst, TensorFlow, Keras, Sci-kit Learn, Pandas, Jupyter Notebooks Miscellaneous: Linux, Robot Operating System (ROS), 3D Printing, Arduino, EaglePCB, AutoCAD