Akib **Nizam**

☎ (+1) 929-272-7107 | ✉ akibnizam1@gmail.com | ⌂ www.almond.epizy.com | akibnizam | akibnizam

Education

Georgia Institute of Technology *Atlanta, Georgia*

B.S. in Computer Science *Aug 2016 - May 2020*

- GPA - 3.9/4.0
- Concentration - Computer Architecture and Information Inter-networks
- Relevant Coursework: OS Design, Advanced OS Design, Algorithm Design, Legal Aspects of Business, Management Statistics

Experience

Bank of America Merrill Lynch *New York City, New York*

Software Engineering Intern *May 2019 - Aug 2019*

- Worked on mathematical model implementations for Merrill's trading platform in C++ for evaluating the intra-day credit, risk, profit/loss of Municipal Bonds – this feature is used by over 2000 traders to manage assets worth over $300,000,000
- Developed Python scripts to check for proper installation of SOFR (Secured Overnight Financing Rate) for intraday risk and profit/loss calculations
- Built web application in JavaScript, NodeJS and SQL to store and view information on real estate development bonds issued by BAML

Qbitlogic *Atlanta, Georgia*

Software Engineering Intern *May 2018 - Aug 2018*

- Built a stack-based buffer-overflow checker in Python for C++ programs with 3% false positive rate using binary analysis techniques
- Caught security vulnerabilities in open source projects using the buffer-overflow checker
- Collected data on performance of different static analyzers and designed improvements for the analyzers based on the data

Aware Home Research Initiative *Atlanta, Georgia*

Undergraduate Researcher for Georgia Tech Labs *May 2017 - Aug 2017*

- Built a data management web application in NodeJS and NoSQL to collect data from smart home appliances in real time
- Built a smart watch application in JavaScript, HTML, CSS and Tizen for senior citizens to notify on safety hazards

Personal Projects

Almond — almond.epizy.com

Stock Option Chain Analyzer *Aug 2019 - Present*

- Built a personal option chain viewer and analyzer of US stocks by creating RESTful APIs in JavaScript, PHP, CSS/HTML
- Implemented some contrarian sentiment indicators to find possible supports and resistances of price action of stocks
- More reliable and user-friendly than other public option chain viewers

Angr — github.com/angr/angr

Binary Analysis Tool - with over 3000 active users *May 2017 - Aug 2017*

- Increased speed and efficiency of the search algorithm, written in Python, that is used in symbolic execution
- Fixed bug in Python code that gave rise to path explosion problem, which is a common and important problem with symbolic execution

Batman Vs. Joker — github.com/akibnizam/Batman-Vs-Joker-Game-GBA-

Nintendo Gameboy Advanced Game *Nov 2017 - Dec 2017*

- Build a game in C where players play as Batman and have to catch Joker while dodging flying projectiles
- The game was named "Top 3" best game of Fall 2017 class of CS 2110 (Computer Organization and Programming)

Skills

Languages/Frameworks C++, JavaScript/jQuery, HTML/CSS, PHP

Other Technologies AngularJS, NodeJs, Ionic, Linux, Git, Bulma CSS, SQL

Extracurricular Activities

Bangladesh Student Association Provide help with event organization to represent Bangladesh on campus

Caving/Outdoors Club Avid caver and currently training to be an instructor for caving trips at Georgia Tech

Billiards Have been training and playing local leagues to become professional pool player