

Ali Siddiqi

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Education

University of Illinois at Urbana Champaign August 2023

Master's Degree, Computer Science

-Relevant Coursework: Cloud Computing Applications

University of Illinois at Chicago December 2020

Bachelor's Degree, Computer Science

-GPA: 3.96/4.0

-Relevant Coursework: Data Structures, Algorithms, Abstract Linear Algebra, Discrete Mathematics, Statistics, Artificial Intelligence, Machine Learning, Data Science, Natural Language Processing

Experience

Northrop Grumman Corporation February 2021 - Present

Software Engineer

-Modified control GUI for Operational Flight Program to display added information (classified)

-Created position encoder interface tool with UDP transmission rates above 1 kHz

-Reduced power consumption of aircraft hardware through Operational Flight Program by 23% to meet contract targets (classified)

Northrop Grumman Corporation June 2020 - August 2020

Software Engineering Intern

-Developed a GUI automation framework from scratch to automate program testing, capable of automating 80% of requirement tests

-Created HTTP agent to interface between automation framework and Robot framework in Jenkins tests

-Defined a standardized naming convention which is now part of the internal project documentation

UIC Mathematical Computing Laboratory January 2020 - March 2020

Undergraduate Researcher

-Worked with a team of other students and a professor to develop software to calculate states of games according to combinatorial game theory rules.

-Designed new type of combinatorial game based off domineering

UIC Minority Engineering Recruitment and Retention Program September 2019 - December 2019

Computer Science Tutor

-Taught students to learn discrete mathematics, problem solving skills, and fundamentals of computational theory

Projects

Intellivast 2020 (Java, Python)

- Worked with team of 4 at HackIllinois to develop financial prediction program

- Implemented spring-mass modeling of stocks using physics laws, conducting FFT's and low pass filters on data

- Improved existing model performance by 15% through combining NLP sentiment analysis of financial news articles

- Achieved 18% returns in 6 month period during backtesting

CAN Bus Hacking 2018 (Graph analysis)

-Built a CAN Bus analyzing tool (CANalyze) that uses the SocketCAN open source CAN interfacing tool to monitor, record, and play CAN signals through the OBD-II port in automobiles

-Isolated signal for tachometer and charted values to interpret signal bytes' values

Skills/Certifications

Languages: C/C++, Python, Java, C#

Tools: Windows Automation, Pandas, Scikit-learn, AWS (Lambda, API Gateway, Aurora, RDS, EC2), Redis, Spark, Hadoop

Active Secret Clearance