**Moushume K. Hai**

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**Education**  **Boston University**  Graduation: Aug 2022

Master of Science, Software Development

**Kean University**  Graduation: May 2020

Bachelor of Science, Computer Science

**Technical Skills *Programming Languages*:** Java, Python, C++.

***Scripting Languages:*** Shell, Bash.

***Developmental Tools:*** Eclipse,ClearQuest,ClearCase Project Explorer, xterm, Putty,

Google Test, GNU Project Debugger (gdb).

***Databases:*** MySQL.

***Platforms and Frameworks:*** Windows, Linux, Ubuntu, CentOS.

**Work Experience L3Harris Technologies** Clifton, NJJanuary 2022 – Present

*Senior Software Engineer*

* Space and Airborne Systems

**Lockheed Martin Corporation** Moorestown, NJNovember 2020 - Present

*Associate Software Engineer, AMES*

* Collaborated with cross-functional development team members to analyze potential system solutions based on evolving client requirements.
* Worked closely with other development teams and infrastructure specialists to deliver high-availability C++ solutions for mission-critical applications.
* Debugged C++ legacy code and located root causes of the problems using gdb and reviewed configuration files and logs.
* Collaborated with developers and product owners to stay current on product features and intended functionality.
* Developed flowcharts and diagrams to describe and layout logical operational steps using pseudocode.
* Identified and resolved problems through research and analysis.

**Projects Kean University**  Union, NJJune 2020 –August 2020

*Undergraduate Researcher, Digital Image Processing*

* Collected images from using photographic devices and an Arduino based Lidar-Lite scanner.
* Applied algorithms using Python Imaging Library (PIL), OpenCV, and Sci-kit packages for image enhancements using the acquired images via image sensors.
* Used MATLAB to create Histograms and show Noise Reduction using C++.
* Analyzed the original images with the processed images using segmentation and showing intermediate results by changing the intermediate floating-point values between 1.0 and 45.0 to show differentiation.

Kean University Union, NJ January 2020 – May 2020

*Undergraduate Researcher, Investigation of Deep Learning for Intrusion Detection*

* Assisted with developing long short-term memory (LSTM) networks in Python, a scripting language using Keras to address a time-series prediction problem.
* Created model representations using Matplotlib in Jupyter to show and detect malicious inconsistencies through validating the predicted sequences and the actual sequences with deep learning approaches.
* Achieved 93.5% accuracy in detecting malicious deviations in sequenced data versus the real data by converting source code file formats and increasing the length of time for a more substantial number of packet transmissions.

**Kean University**  Union, NJJune 2020 –August 2020

*Undergraduate Researcher, Digital Image Processing*

* Worked with a DJI Mavic Pro to collect aerial photos/videos to gather real-time flight-related data – such as GPS coordinates, temperature, pressure, humidity, altitude, speed, and velocity.
* Developed an automated flightpath leveraging JavaScript and DJI GO APP for the drone to record real-time data when traveling to different locations.
* Developed automation solutions leveraging shell and JavaScript to increase operational efficiency.
* Imported the data into an excel sheet and converted it to a .CSV extension.
* Created a local database using MySQL workbench and imported the .CSV file for analysis of the GPS coordinates.