

# IFTIKHAR KHAN

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## EDUCATION

**Boston University, Boston, MA**

Mar 2022-Present

**MS, Software Development**

**Stony Brook University, Stony Brook, New York, NY**

May 2019

**B.E., Electrical Engineering, Cum Laude Honor**

**G.P.A 3.52**

- **University Dean's List Honor Recipient:** Received Dean's List recognition for outstanding Grade Point Average
- **IEEE PES Scholar (2015-2018):** Recipient of Institute of Electrical and Electronics Engineers (IEEE) Power Energy Scholarship
- **Fellow, America Needs You (2015 –2017):** Selected from an applicant pool of over 300 first-generation college students in New York to serve in a two-year career development and leadership training program
- **New Visions for Public Schools Scholarship Recipient (2012-2016):** One out of ten NY State public high school students chosen to receive scholarship for academic excellence and leadership

**Relevant courses:** Java, Hardware Software Co-Design of Embedded Systems, Computer Vision Techniques, Software Development in C++ and C, Data Structures and Algorithm, Embedded System Design with Atmel AVR Microcontrollers, FPGA and PLD programming with VHDL, Real Time Operating System, Kernel Programming, Multithreading Concepts

**Technical Skills:** Real Time Embedded Software Development with Embedded C and Assembly Language, Python (Intermediate), Microprocessor Architectures, Design and Build Microprocessor Controlled Circuits, Experience with SPI, RS-485/232 and USART Communication Protocols, Understanding over RTOS concepts and Kernel development

**Engineering Projects:** Stroboscope Design with Atmega16 Microcontroller coded in Assembly Language, Automated Plant Growth Chamber Design with AtMega128 Microcontroller coded in Embedded C, Sound Controlled Stopwatch

## EXPERIENCE

**The Boeing Company**

Philadelphia, PA

**Embedded Software Engineer – V22 Osprey, Boeing**

June 2019 – Present

- Design and test embedded software for the V22 Osprey Tiltrotor Aircraft
- Perform hardware-software integration of the software builds through lab simulation and emulation
- Participate in formal design and code reviews; identify defects, formulate solutions and track them to implementation
- Learned to use various design, development, code coverage, version control and code review tools such as: Visual Studio, Gnat Studio, Green Hills RTOS, VectorCAST Code Coverage, Beyond Compare
- Designed and developed various requirement driven firmware modules for military aircraft platform

**Collins Aerospace- A United Technologies Company**

Bohemia, NY

**Software Engineering Intern**

September 2018– May 2019

- Worked with a cross-functional design team to develop new and maintain existing embedded applications for controlling LED lighting systems and fixtures.
- Developed test applications (Python) for supporting all phases of development and verification of deliverable applications.
- Tested software designs and code at the unit and system level to ensure that all requirements are met, and the highest software quality is achieved.
- Participating in software design and design reviews as part of the development team.

**Data Device Corporation**

Bohemia, NY

**Applications Engineering Intern**

January 2017 – May 2018

- Lead a project to build a motion feedback sensor data-operated robotic arm and developed corresponding console application in C++ and graphical user interface software in C# to communicate with the arm showcasing company's motion feedback product line strength
- Streamlined the process of deploying new software releases by writing content for software manuals and creating instructional software installation video guides
- Managed a project to develop a graphical user interface program in C# to display angle and velocity data fed from a resolver sensor installed on a brushless DC motor using motion feedback hardware and software