# Mahdi Quddush Mahi

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#### **EDUCATION**

**Boston University,** Metropolitan College, Boston, MA

March, 2022 - Present

M.S., Software Development

**Stony Brook University,** College of Engineering, Stony Brook, NY B.E., Electrical Engineering

May, 2019

GPA:3.30

- *Relevant Project:* Human Emotion Identification and Measurement in Real-Life Situations, Microcontroller Based Digital Clock programmed with Atmel Studio; Embedded Stroboscope Design with Microchip Microcontroller, Embedded Plant Growth Chamber Design with Microchip Microcontroller, Design inverter and decoder using OrCAD capture, Three Dimensional Fourier Transform Program in C++, Bank Queue Simulation Application in C++
- *Relevant Courses:* Informations Structures with Java, Embedded System Design with ATMega Family Microcontroller using embedded C and assembly language, Data-structure, Semiconductor Devices Physics, Digital System Design, Electromagnetism and Field Line Theory, Software Development with C++, Analog and Discrete Circuit design with Field Effect Transistors, Assembly Language Programming on Atmel Studio IDE, Integrated Chips

### PROFESSIONAL EXPERIENCE

The Boeing Company, Boeing Avionx, St. Louis, MO

June 2019 – Present

## **Electrical Design and Analysis Engineer**

- Collaborate with senior firmware engineers for more efficient and reusable firmware design for qualified defense aircrafts
- Implement top level firmware design, integrate different modules based on customer requirements on specific Boeing defense products
- Gain experience with industry standard tools for VHDL design, verification and FPGA testing in the lab environment
- Participate in code review sessions and make modifications based on feedback received from reviewers.
- Participated in formal design reviews to present the updates in the firmware of MO25 program to the customers.
- Familiar with DO-254 standards and write detailed system requirements
- Understand, improve, and contribute to Boeing Behaviors on a regular basis
- Communicate regularly with the verification team to explain and answer questions on the requirement.
- Perform prototype testing on firmware build.

## North Atlantic Industries Power Division, New York, NY Test Engineer Intern

October 2017 – June 2019

- Test Engineer Intern
- Install, test and verify operation of functional electronic modules on various form factor external peripheral cards.
- Collaborate with engineers to troubleshoot faulty systems following systematic procedures.
- Interact with potential customers to receive design parameters and relay information to design engineers for production.
- Analyze test data to understand the circuit performance and the cause of failure.
- Research for opportunities to improve legacy designs to streamline the process of building future systems.
- Testing and improving of an existing design of phase angle voltmeter to reduce noise.
- Design test setup for a product which controls the power supply of airplane.

# Electronics Design Lab, Stony Brook University, NY

August 2018-December 2018

#### **Teacher's Assistant**

- Assist students to perform weekly lab experiments on different electronics concepts such as MOSFETs, different amplifiers and filters.
- Hold office hours to help students in gaining better understanding on the theoretical part of the course material and using OrCAD capture, provide helpful feedback on assignments to improve students' performance.

#### Honors/Awards

- University Dean's List Honor Recipient: Received Dean's List recognition for outstanding Grade Point Average.
- IEEE PES Scholar (2015-present): Recipient of Institute of Electrical and Electronics Engineers (IEEE) Power Energy-Society scholarship which provides scholarship and internship opportunities to high-achiever Electrical Engineering students.