Syed Saahir S. Ahmed

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EDUCATION

BSc The Pennsylvania State University Electrical Engineering Aug 2015- May 2019

- GPA: 3.43 / 4.00

EXPERIENCE

Northrop Grumman Corporation ***Lemont, IL***

Associate Electrical Engineer at NGC Mission Systems Aug 2019 – Present

- Developed a test set for a program to test RF modules off production units to reduce transit time between sites
- Creating a data tool using python and batch scripts that provides real-time and automated analytics to various high-visibility programs to increase troubleshooting accuracy and reduce test and troubleshoot time by up to 80%
- Setting up TPS (Test Program Set) and Test sets for new programs that will soon move into high volume and production using circuit schematics and building cable assemblies on Zuken cable

Argonne National Laboratory ***Lemont, IL***

Robotics Engineer Intern at Applied Materials Division May 2018 – Jul 2018

- Modified accurate simulations of dry nuclear waste handling facilities and specific tooling tasks for robotic automation using the V-REP and Lua in Linux environment
- Created a hardware-in-the-loop simulation for testing complex tooling tasks before hardware deployment, which allowed for an affordable prototyping process before deployment using ROS, Baxter Robot, Python and C++

Argonne National Laboratory ***Lemont, IL***

Electrical Engineer Intern at X-Ray Science Division May 2017 – Aug 2017

- Developed an image processing procedure for identifying in x-ray tomography data the porosity of 3D printed parts with an accuracy of 95% and doing 3D reconstruction of those pores using Python and MATLAB
- Coded a procedure in Python that takes HEDM grain data of polycrystalline structures through different load conditions and made it mappable and easily accessible through ParaView

ADN Telecom Limited ***Dhaka, Bangladesh***

Radio/Optics Team Engineer Jun 2016-Aug 2016

- Setup radio devices at cell towers to provide network to underprivileged areas while learning about the hardware
- Programming a point of presence to be setup in a new area of the city for a local client of the company

COMMUNITY EXPERIENCE & ACTIVITIES

Nittany Data Labs ***Penn State – University Park***

Chatbot Project with Disney Animation Studios Aug 2017 - Present

- Produced a chatbot prototype that was presented to the studio to showcase the capabilities of using such a program for promotion and even office productivity
- Coded this chatbot using Python and JSON and connected this chatbot with the Slack API

Mohona – Bangladesh Cultural Club ***Penn State – University Park***

Founder, Current Treasurer (previously Vice-President) Mar 2017 - Present

- Founded this club for undergraduates to learn and immerse in Bengali culture and to gain experience hosting events and making new connections
- Organized the Bengali new year 2017 and Bengali mock wedding event in 2018 and made a profit from both events that went towards further promoting and helping generate more interest in Southeast Asian cultures

Penn State Advanced Vehicle Team ***Penn State – University Park***

Controls Systems, Modelling and Simulations Team May 2018 – Present

- Building and improving modules related to transmission shift and torque split for the 2016 Camaro Hybrid to improve efficiency and performance
- Collaborating with electrical team to improve schematic documentation and wiring

LEADERSHIP POSITIONS

Mohona – Bangladesh Cultural Club – *(Founder & Treasurer)* May 2018 - Present

Penn State Robotics *(Firefighting Robot Team Lead)* Aug 2016 – May 2017

HONORS AND AWARDS

Ford Motors Scholarship Aug 2018-May 2019

Kwang Y. and Sangwol Lee Trustee Scholarship Aug 2017-May 2019

IEEE – HKN Member Inductee Feb 2018

SKILLS

Verbal Language

- Bilingual in English and Bengali
- Elementary proficiency in French

Technical Skills

- Arduino, Raspberry Pi, Baxter Robot, X-Ray High energy diffraction microscopy
- C++, Python, C, Lua, MATLAB, ROS, HTML, CSS, Javascript, batch scripting
- V-REP, Unreal Engine, LabView, Tableau, LabWindows CVI, Multisim, Linux,