# Syed Saahir S. Ahmed

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# **EDUCATION**

The Pennsylvania State University BSc

Electrical Engineering

Aug 2015- May 2019

GPA: 3.31 / 4.00

# **EXPERIENCE**

# **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**

IEEE - HKN Member Inductee

Kwang Y. and Sangwol Lee Trustee Scholarship

Aug 2017 & 2018

Feb 2018

**SKILLS** 

# Language:

- Bilingual in English and Bengali
- Fluent in French, Learning Japanese

#### **Technical:**

Arduino, Raspberry Pi, Baxter Robot

HTML, CSS, Javascript V-REP, Unreal Engine, LabView, Tableau, Multisim, Linux

C++, Python, Lua, MATLAB, ROS,