# **ROSHAUN BRADY**

## **EDUCATION**

# **Rensselaer Polytechnic Institute**

BS in Mechanical Engineering Minor Electrical Engineering Expected May 2020 | Troy, NY

## CONTACT

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Rosedale, NY 11413

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#### **LINKS**

Website: roshaunbrady.github.io Linkedin://roshaunbrady007

## **COURSEWORK**

Electric Circuits
Embedded Controls
Elements of Mechanical Design
Modeling & Control Systems
Digital Control Systems
Electronic Instrumentation
Propulsion Systems
Strength of Materials
Computer Science
Inventors Studio

# **EXTRACURRICULARS**

**Visual Processing** 

**National Society of Black Engineers** 

- » Treasury '17-'18
- » Senator '16-'17

Annual NSBE/SHPE Career Fair

- » Treasury '18
- » Recruiting Committee '17

## **RPITV**

- » Secretary '16
- » Business Manager '17

Black Student Association 4RWI Alpha Team

» Leadership Winner'16 Corona Panthers Pathfinder Club Capital City SDA Church

» Programs Coordinator'18

## **EXPERIENCE**

Tesla | Hardware Engineering Intern FREMONT, CA

AUG 2019 - DEC 2019

- Conducted comprehensive system tests on various energy products, such as Tesla Megapack, V3 Solar Panels, Solar Inverters, and MCI's, for ideal solar system integration.
- » Developed Python code in conjunction with MySQL and Tableau to analyze and maintain solar roof performance data.
- Developed standard documentation for the NEC on solar panel construction and PV safety requirements.

Amazon | Technical Operations Intern COPPELL, TX

JUNE 2019 - AUG 2019

- » Managed the technical operations of DFW6 Amazon Fulfillment Center for optimal system performance.
- » Engineered a new operations process for the non-conveyance sector of facility and designed a robust catwalk for maintenance care.
- » Assisted Amazon Robotics technicians with improving and repairing equipment.

FirstEnergy | Portfolio Engineering Intern AKRON, OH

AUG 2018 - DEC 2018

- » Managed the selection, prioritization, and management of DX and TX portfolios (5.6B per year).
- » Assisted project managers with the initial scoping, estimating, and design of various electric projects.

SelfArray | Engineering Intern, NSF Grant #1758627 TROY, NY

- JUNE 2018 AUG 2018
- » Developed a new python based image analyzing software (ASASIN) capable of feature detection.
- » Designed a precision automation tool to control and enhance our patented assembly process for micron-sized LEDs using NX.
- » Conducted research on the assembly of LEDs on different stages to find optimum vibration conditions which increased assembly efficiency by 26%.

## **PROJECTS**

Flight State ID Sensing via Al Aerospace Research Project

JAN 2020 - MAY 2020

» Currently using machine learning with TensorFlow & Python to idetntify flight state

**3-D Human-Centered Simulation** Visual Processing Project

MAR 2019 - MAY 2019

» Created a 3D "game" containing 3 different rooms with the purpose of evoking different emotions in the user, respectively.

**Smart Car** Embedded Hardware Project

JAN 2018 - MAY 2018

Developed code and implemented hardware to design a "Smart Car" that can detect obstacles and drive independently towards a given heading. Based on user input, the car could also carry out various tasks within a given time frame.

## Optical Communications Link | Team of 4

DEC 2017

» Used an optical transmitter and receiver circuit to send a series of light pulses that encoded an audio signal to be received by a speaker. Tested using the Wii Theme song.

#### **SKILLS**

**Software:** SolidWorks, NX8.5, LabView, PSpice, MATLAB, Arduino, AutoCAD, MicrosoftOffice, Visio, Oracle (OPPM), MySQL, TensorFlow

Coding Languages: Python, C, Java, HTML, CSS, JavaScript, OpenCV Library\*

Mechanical/Electrical: Circuit Building, Arduino, Metal/Plastic Welding, Lathe, Drill Press,

Milling Machines, Band Saw

**Audio/Visual:** Adobe Premiere Pro CC Editing Program, Adobe Photoshop, Adobe Illustrator, Adobe InDesign, 4k Cameras