# NAVEED RIAZIAT

## CONTACT

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## **EDUCATION**

Purdue University | May 2020

**BSME**, ECE Minor **GPA**: 3.72/4.0

Dean's List: 2016-2019

# **COURSEWORK**

PDEs and Linear Algebra

Thermodynamics

Dynamics/Statics

Fluid Dynamics

Linear Circuit Analysis

Mechanics of Materials

## **AWARDS**

Purdue Presidential Scholar Purdue EXPO Scholarship HackIllinois Winner

Purdue Bottomley Scholarship

## **SKILLS**

Solidworks Metalworking

CATIA Data Analysis

Python CMCs

MATLAB Machining

C/C++ DFX/DFA/DFM

Adobe Elem. CAM
Office Suite GD&T
FMFA ABAQUS

# **SOFT SKILLS**

Presentations and Public Speech Project/Team Management

Photography/Design

**Technical Documentation** 

## **WORK EXPERIENCE**

#### **APD Mechatronics Intern**

Intuitive Surgical

May - Aug. 2019

Sunnyvale, CA

- Prototyped Next-Generation System Components
- Analyzed Workflow and Operating Room (OR) integration
- Introduced Electromechanical Systems for Improved Testing
- Designed Fixtures for System Characterization
- Coordinated with CDE's, Surgeons, Engineers to Inform Design Requirements.

### CMC Manufacturing Eng. Intern

May - Aug. 2018

Cypress, CA

Rolls-Royce High Temperature Composites

- Introduced novel machining fixtures for 5-Axis Machines
- Instated Tool Tracking to predict tool wear for purchasing
- Launched SOP/TI development for new capabilities

#### Motion Algorithms Intern

May - Aug. 2017

San Jose, CA

TDK Invensense

- Pioneered OpenCV drone implementation
- Developed Motion Algorithms w.r.t. g-axis MEMS
- Streamlined signal processing with Python, C++, MATLAB

#### Nanowire LED Intern

GI O

May - Aug. 2015 Sunnyvale, CA

lav backlights

• Headed testing of LED bar display backlights

Design of assembly fixtures for FPC ACF bonding

## **EXTRACURRICULARS**

## Control Systems lead

Feb. 2018 - Present

Purdue Hyperloop

- Upgrading pneumatically actuated stability systems
- Designing Novel Propulsion Wheels using FEA and CATIA
- Machining/manufacturing Aero, Propulsion, Braking Systems

### Senior Mentor

Aug. 2016 - Present

Purdue Honors College Racing Team

- Spearheaded CAD/CAM workshops for incoming students
- Developing and overseeing all engineering projects, rollcage dampeners, chassis dynamics
- Pioneered novel sensor suite for kart tuning

#### Design Engineer

Feb. 2018 - Aug. 2018

**Purdue Robomasters** 

- Designing innovative robotic manipulators using Solidworks
- Utilizing DFA/DFM to create cost/time effective designs

#### Control Algorithms Engineer

Sept. 2017 - May 2018

Purdue Mars UAV Team

- Integrated science and controls sensor systems
- Developed control systems for flight navigation/control
- Engaged in PDR/CDR preparation for industry review