NAVEED RIAZIAT

CONTACT

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Address
[redacted]

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
CATIA
Python
MATLAB
C/C++
Adobe Elem.
Office Suite
FMEA
Metalworking
Data Analysis
CMCs
Machining
DFX/DFA/DFM
CAM
GD&T
ABAQUS

SOFT SKILLS

Presentations and Public Speech
Project/Team Management
Photography/Design
Technical Documentation

WORK EXPERIENCE

APD Mechatronics Intern *May – Aug. 2019*
Intuitive Surgical — 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*
Rolls-Royce High Temperature Composites — Cypress, CA

- 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*
TDK Invensense — San Jose, CA

- Pioneered OpenCV drone implementation
- Developed Motion Algorithms w.r.t. 9-axis MEMS
- Streamlined signal processing with Python, C++, MATLAB

Nanowire LED Intern *May – Aug. 2015*
GLO — Sunnyvale, CA

- 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