Keyur J. Rana

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EDUCATION

Rutgers, The State University of New Jersey, School of Engineering   New Brunswick, NJ
Bachelor of Science in Electrical Engineering   Graduation date: May 2024
Cumulative GPA: 3.515
Honors: Dean's list - 5 Semesters

WORK EXPERIENCE

L3Harris Technologies, Inc.   Rochester, NY
Systems Intern   (May. 2022–Aug. 2022)
- Conducted comprehensive testing of military radios, evaluating their performance across various RF and HF communications waveforms.
- Collaborated with a cross-functional team of engineers to troubleshoot and resolve technical issues, enhancing radio reliability and functionality.
- Developed and executed demonstrations for international customers, showcasing the effective utilization of radios for their specific operational requirements, including RF and HF applications.

Greenman-Pedersen Inc.   Suffern, NY
Electrical Intern   (Jun. 2022–Aug. 2022)
- Performed construction administration and field investigation tasks for assigned projects to ensure that the project met the requirements
- Constructed riser diagrams for the fire alarm system using AutoCAD due to the outdated fire alarms
- Commissioned about 30+ electrical drawings detailing the system design for projects to be sent to the contractor

PROJECT EXPERIENCE

Marble Sorter   (Fall 2020)
- Engineered and constructed a robot that sorts 20 marbles with different properties and appearances using VEX Robotics
- Gained hands-on experience with VEX robotics and refined programming skills using ROBOTC

Automated Guided Vehicle (AGV)   (Spring 2020)
- Formulated and instituted an AGV that follows a line path carrying cubes to simulate inbound and outbound handling for replenishment and picking
- Conceptualized and programmed the Cortex Microcontroller in standard C using the ROBOTC program

NASA HUNCH Design and Prototype National Finalist

Collapsible Sleeping Quarters   (Fall 2018–Spring 2019)
- Managed and coordinated with a 20-member team, presented progress and ideas regularly to the Project Manager
- Designed and developed a prototype from scratch of the collapsible sleeping quarters for the International Space Station with a budget of $150
- Took the initiative in building a control panel for monitoring ventilation, CO/CO2 readings, and crew health
- Achieved favorable recognition by applying automation to a design presumed to be manual

LEADERSHIP EXPERIENCE

Formula Racing - Rutgers   (Fall 2021–Spring 2022)
Electric Powertrain
- Research ways to monitor and identify faulty voltages of individual battery cells from a large Li-ion battery pack
- Design vehicle's low-voltage and high-voltage systems from 12V to 400V
- Communicate and collaborate with sub-teams to run tests and discover potential malfunctions
- Fundraised over $22,000 through football concession stands

SKILLS

Software
- Python, LTSpice, MATLAB, AutoCAD, RISC-V, C/C++, HTML, CSS, JAVA, ROBOTC, Multisim
- Certified Autodesk Inventor User, CAD
- Microsoft Suite

Hardware
- Circuit design, CNC milling, power supply, oscilloscope, function generator, and Multimeter
- Competent proficiency in implementing VEX, TETRIX, and Microcontrollers

Language
- Hindi, Gujarati, English