

DARIAN WILKINSON

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EDUCATION

Old Dominion University
BS Electrical Engineering

Norfolk, VA
May 2021

SOFTWARE/APPLIED SKILLS

Software Skills: C++ | Python | AWS | Unix | Matlab/Simulink | NI Labview | Eagle CAD |
Altera Quartus (VHDL) | Arduino Environment | PSPICE | SAP | PAMS
Applied Skills: Control System Design | Labview Instrumentation | Semiconductor Fabrication
Power Electronics | Machine Learning

PROJECTS

Miniaturized Rail Gun

Led a team of five engineering peers to design a functioning Rail Gun. Our team researched the properties of the Lorentz force and applicable physics laws/theories to apply to our Rail Gun design. The Lorentz force uses electric current and magnetic fields to apply a force to an electrically conductive projectile. Our team also designed a pulse-power network, consisting of an AC-DC converter and capacitor bank, to power the rail system.

Autonomous Obstacle Avoidance Vehicle Design

Collaborated with three engineering peers to design a functioning autonomous, line-following vehicle with obstacle avoidance. The vehicle was built and programmed using an arduino uno microcontroller. An array of photodiodes was used to detect a black line painted on a white track. An ultrasonic sensor mounted to a servo motor was used to detect obstructions on the track. Two brushless DC motors were used to maneuver the vehicle.

WoW Club Robotics Education

Collaborated with one education student to teach two 5th grade students the properties of robotics and biomimicry. Our team taught the properties of servo motors, LEDs, ultrasonic sensors, and microcontrollers to the students. We assisted the group in building and programming a "COVID companion" robot. The students programmed and constructed a robotic cat that moves and detects motion using various commands. I gained experience in education, working with children, and collaborating with students from other fields.

WORK EXPERIENCE

Engineer I (Procurement Engineering)

Dominion Energy

Richmond, VA
November 2021 - Present

- Develop Technical Evaluations and Item Equivalency Evaluations for technical equipment used in nuclear power plants
- Oversee the purchase of technical equipment for industrial operations
- Work with Sourcing, Engineering, and Quality Inspectors to determine the equipment needed to complete manufacturing or construction projects

Mobile Courier

Self Employed

Norfolk, VA
June 2020 - November 2021

- Deliver customer's order to homes and places of business within established time frames
- Effectively communicate and resolve issues between merchant and customers
- Perform additional safety measures when handling orders and interactions with others due to COVID

Residents Assistant

ODU Housing And Residents Life

Norfolk, VA
August 2018 - May 2020

- Served as a positive role model to residents and peer staff members
- Developed a sense of community among residents as member of a floor, resident of a hall, and active participant in the residents' life system
- 2018-2019 RA for Cybersecurity living-learning community

Peer Mentor (Cybersecurity)
ODU Academic Initiatives

Norfolk, VA
March 2018 - May 2018

- Served as mentor for first year Cybersecurity students
- Identified concerns of typical first year students and guiding them to proper assistance
- Collaborated with professionals and educators in the Cybersecurity field