Willard Ryan Sullivan

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Education:

University of Illinois at Urbana-Champaign, The Grainger College of Engineering
- Electrical Engineering Student, Expected graduation in 2023
- GPA: 3.4

High School Diploma, Engineering Pathway - Quince Orchard High School
- Gaithersburg, MD. Graduated in May 2019
- Engineering Curriculum - Project Lead the Way (PLTW)

Work Experience:

Intern - Quidient
July 2018, March - May 2019, May - August 2020, January 2021. Columbia, MD.
- Translated MATLAB Radiometric Calibrations to Python to modernize their Scene Reconstruction Engine
- Worked with image processing and manipulation within Python
- Engaged in generalized 3D scanning/scene reconstruction projects
- Completed market research and other company tasks to aid in the development of new imaging systems

System Engineer Intern - Leidos
June - August 2019. Gaithersburg, MD.
- Obtained a Public Trust Clearance to fulfill position requirements
- Developed data analytics skills to determine potential problems with hardware utilization within servers that run TBFM (Time Based Flow Management) software
- Created an Excel Macro that generates graphs with given data, resulting in time and money savings
- Wrote multiple guides and procedures on my tasks to aid future hires and to maintain a documentation base

Extracurricular Activities:

Illini Solar Car - https://www.illinisolarcar.com/
Mechanical Team Member (2019 - present), OpenLab Representative (2020 - 2021), Melec Lead (2021 - present).
- Worked with other aspiring engineers to design and construct a car that operates on solar energy
- Extensive research to find the best materials, manufacturing techniques, and electrical components
- Immense hands-on experience with 3D Printing, CNC Milling, working with carbon fiber, and more
- Led various subteams and assisted them on their individual projects

Illini 4000 - https://www.illini4000.org/, http://www.portraitsproject.org/
Team Bike America Rider (2019 - 2021), Logistics Officer (2020 - present).
- Cycled with a team of 18 students from New York City to San Francisco to raise funds and awareness for cancer research and support services
- Collected Portraits (short interviews) on peoples' experiences with cancer to share with the world
- Planned and organized many aspects of the ride, including stayovers/lodging and routes

Quince Orchard Engineering and Robotics Club - https://qoengineering.club/
Vice President (2018-19), 3D Printer Manager (2016-18), Member (September 2015 - May 2019).
- Collaborated with teammates on designing and constructing robots for the FIRST Tech Challenge
- Assisted in the planning of various events and leading lower ranking officers
- The Club has won five awards in four years in the FIRST competitions due to collaborative teamwork

Skills:

- Python, C, and SystemVerilog programming languages
- Autodesk Inventor, Creo Parametric, KiCad, Multisim Circuit Simulation
- 3D printing and the designing of 3D printed models. Cura and PowerPrint slicing softwares
- Google and Microsoft Office Suites
- Mechanical and electrical robotic engineering design experience