# Willard Ryan Sullivan

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#### **Education:**

### Electrical Engineering Student - University of Illinois at Urbana-Champaign

- Urbana/Champaign, IL. Expected Graduation in 2023
- Grainger College of Engineering

#### High School Diploma, Engineering Pathway - Quince Orchard High School

- Gaithersburg, MD. Graduated in May 2019
- Engineering Curriculum Project Lead the Way (PLTW)
- GPA: 4.45 (Weighted), 3.85 (Unweighted)

## Work Experience:

#### **Intern-Quidient**

July 2018, March to May 2019, Summer 2020. 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 to 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, saving thousands of dollars
- 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 - present). UIUC

- Worked with other aspiring engineers to design and construct a car that operates on solar energy
- Developed skills in Creo CAD program to design major physical components
- Extensive research to find the best materials, manufacturing techniques, and electrical components

#### Illini 4000 - https://www.illini4000.org/, http://www.portraitsproject.org/

Team Bike America Rider (2019 - present), Logistics Officer (2020 - present). UIUC

- Bonded with a team of 23 students to prepare for a cross-country bike trip during the summer
- Organized events to fundraise money to donate to various cancer research and support services
- Interviewed various guests on their experiences with cancer to then share with the Portraits Project

#### Quince Orchard Engineering and Robotics Club - https://goengineering.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/C++ with Arduino, HTML/Bootstrap
- Autodesk Inventor, Creo Parametric, KiCad
- 3D printing and the designing of 3D printed models. Cura, PowerPrint
- Google and Microsoft Office Suites
- Robotic mechanical and electrical engineering design