

# Steven Kuo

[stevenkuo711@gmail.com](mailto:stevenkuo711@gmail.com) | 443-640-8669 | College Park, MD 20742

Github: <https://github.com/stevenkuo711/portfolio>

## EDUCATION

### University of Maryland

B.S. Mechanical Engineering

University Honors

College Park, MD

Expected May 2026

Expected Citation May 2024

### Dulaney High School

High School Diploma, GPA 4.00/4.00 (unweighted), 5.81/6.00 (weighted)

Timonium, MD

June 2022

## SKILLS

**CAD:** SolidWorks, Autodesk Inventor, Siemens NX & NASTRAN, GrabCAD

**Engineering:** FDM 3D Printing, Waterjet, Machining, FEA

**Programming:** Java, C++, MATLAB

## EXPERIENCE

### UMD Loop

College Park, MD

*Not-A-Boring Competition - Tunnel Support Member*

September 2022 - Present

- Modeled parts with complex geometries in Solidworks
- Created engineering drawings to communicate with manufacturers and get quotes
- Ran FEA on components in NX to determine structural integrity and optimize designs

### Leatherbacks Combat Robotics

College Park, MD

*1 lb Antweights, 30 lb Member*

September 2022 - Present

- Designed parts in Solidworks for robots in both the 1 lb and 30 lb weight classes
- Manufactured parts for the 30 lb robot by operating the waterjet with CAM software
- Employed the drill mill to perform precision facing operations and place accurate holes

### Dulaney FIRST Robotics Competition

Timonium, MD

*Team President*

September 2018 - May 2022

- Taught new members how to fabricate parts with metalworking tools and 3D printers
- Collaborated remotely through GrabCAD in a design team of 4 members to complete the initial design of the robot with Autodesk Inventor within 2 weeks
- Managed a team of 20 members to fabricate, and test the robot within 6 weeks
- Supervised the programming subteam to help with debugging as well as incorporating encoders and PID control loops for precise movement control
- Raised \$5,000 via sponsorship outreach and presentations to operate the team

### Dulaney VEX Robotics Competition

Timonium, MD

*Club Secretary, Team Co-Captain*

September 2018 - May 2022

- Used spreadsheets to keep track of part orders and spending
- Mentored teams within our organization to help troubleshoot and test designs
- Collaborated in a team of 5 to design, build, and test a 18" x 18" x 18" robot
- Utilized sensors like potentiometers and encoders to program autonomous routines and teleoperated controls that assisted the driver