

# Ashik Simon

(702)-353-5745 | [ashiksimon@gmail.com](mailto:ashiksimon@gmail.com) | [linkedin.com/in/ashiksimon](https://www.linkedin.com/in/ashiksimon) |

## EDUCATION

---

**University of California San Diego**  
*B.S. in Mechanical Engineering GPA: 3.74 (Junior)*

La Jolla, CA  
September 2018 – June 2022

## EXPERIENCE

---

**Mechanical Design Engineer**  
*Yonder Dynamics*

Oct 2019 – Present  
UCSD La Jolla, CA

- Collaboratively worked with a group of student engineers to build a robot for the University Rover Challenge
- Created a lightweight, high dexterity robot arm with six degrees of freedom
- Worked with Solidworks CAD modeling/simulation to perform risk reduction utilizing FEA
- Developed rotating base out of acetyl that is capable of withstanding high loads while remaining lightweight
- Designed cost-effective parts that are manufacturable with on-campus equipment, primarily 3D printing and lasercutting

**Fabrications Engineer**  
*AIAA Design-Build-Fly*

Oct. 2019 – Present  
UCSD La Jolla, CA

- Worked with a team of students to design, fabricate, and demonstrate the flight capabilities of an electric-powered, radio-controlled aircraft
- Constructed a lightweight 5 foot wingspan airplane airframe weighing under 3 kilograms
- Utilized multiple composites and adhesives for layups including carbon fiber, kevlar, and fiberglass to achieve desired strength properties
- Applied mold making concepts to manufacture positive molds from foam using hot-wire cutters
- Troubleshooted and made repairs on the field to minimize testing downtime

**Software Developer**  
*Craftvue*

Jan. 2018 – June 2019  
San Marcos, CA

- Developed a custom application with Laravel web framework to help teachers manage data, organize safety assessments, and material inventory
- Effectively communicated with clients to properly incorporate ideas and concepts into the application
- Successfully implemented in two schools with over 250 users

**Subsystem Engineer**

*FIRST Robotics Competitions Alpha Knights*

Sep. 2016 – June 2018  
San Marcos High School, CA

- Oversaw the integration of multiple systems by designing and fabricating parts as well as delegating tasks to newer members
- Thoroughly researched components and followed competition policies and procedures
- Attended FIRST worlds championship after obtaining the Rookie All-Star Award for innovative design

**Engineering Team Member**

*Northrop Grumman Innovation Challenge*

Oct. 2015 – April 2016  
San Marcos High School, CA

- Developed a helium airship design the first year by manufacturing a custom mylar balloon and implementing model RC aircraft controls
- Designed a hovercraft capable of carrying 15 lbs of payload through an obstacle course

## TECHNICAL SKILLS

---

**Modeling and Analysis:** Autodesk Fusion 360, Autodesk Inventor, Solidworks

**Programming Languages:** Java, Php, Python, MatLab

**Fabrication & Prototyping:** Woodshop Machinery, CNC, Lasercutting , 3D Printing, Soldering

## HONORS

---

- UCSD Provost honors for 5/5 quarters awarded for 3.5+ GPA
- Nordson BUILDS Scholarship awarded for pursuing manufacturing industry

## EXTRA PROJECTS

---

- Constructed a 9 foot tall trebuchet in the Explorer Post STEM youth organization
- Competed in the San Diego Regional Science Olympiad. Awarded 1st place for robot arm event and 3rd place for hovercraft event.
- Build and modify 2 Prusa I3 style RepRap 3D printers