

# Arnav Akarte

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Detail-oriented mechanical engineer with strong ties in design and manufacturing processes. Experienced team player with extensive training and knowledge. Driven and mature college student with experience in a professional environment. Majoring in Mechanical Engineering with a Minor in Business Administration.

## EXPERIENCE

**Front Desk Manager / Customer Service Representative** July 2020 - August 2021 Fly Bay Area | San Carlos, CA

- Manage and assist passengers in informing and guiding purchasing decisions
- Organize and train other staff members accurately and efficiently
- Execute and coordinate schedule changes based on aircraft availability, maintenance needs, and pilot schedules
- Provide impeccable customer service by addressing customer concerns, needs, and requests to help them make an informed decision

**Undergraduate Research Assistant / Thesis Co-Author** Jan. 2022 - Dec. 2022 Loyola Marymount University: Mechanical Engineering Department | Los Angeles, CA

- Research and analyze additive manufacturing using titanium alloys
- Cooperate and coordinate with graduate students to effectively execute experiments to yield meaningful results
- Develop and review major parts of a thesis based on the effects of heat treatment and stress relievers on Titanium alloy Ti6Al4V

**Machine Shop Assistant** Oct. 2022 - Oct. 2023 Loyola Marymount University: Mechanical Engineering Department | Los Angeles, CA

- Ensure safety and proper machining procedures at the campus Machine Shop
- Implement learned skills to accurately machine and manufacture parts and samples for classes and research
- Experience with Haas Mini Mill and Haas Lathe
- Act as a teachers assistant to enhance and support the learning environment
- Proficiency in CAD and CAM in both Fusion 360 and Solidworks

**LMU Rocket Team** Sept. 2023 - Present Loyola Marymount University: Mechanical Engineering Department | Los Angeles, CA

- Learn, design, and test a hybrid-fuel rocket and static test fire stand
- Work with teammates to design the solid fuel, P&ID, sensors, nozzle, test stand, ignition, and injector
- Specifically in charge of nozzle design and calculations, test fire stand design and FEA, various parts of the injection and ignition mechanisms
- Ability to problem-solve and quickly grasp new concepts and skills

**Archbishop Mitty FRC Robotics / Chassis Lead** Aug. 2016 - May 2020 Archbishop Mitty High School | San Jose, CA

- Develop proficiency in design process and manufacture a robot chassis and drivetrain system
- Leadership skills to lead and manage a team of students, make decisions, and resolve conflicts
- Coordinate meetings and communicate with teammates to create an efficient and functional end product
- Proficiency in CAD and CAM in both Fusion 360 and Solidworks

### **EXTRACURRICULAR PROJECTS**

#### **FPV Racing Drone**

- Develop proficiency in soldering and electrical skills
- Program and troubleshoot the Flight Controller and software

#### **Electric Skateboard**

- Gain knowledge about electric power
- Custom 3D modeled and manufactured motor mount

### **OTHER EDUCATIONAL PROJECTS**

#### **PID Drone Control System**

- Develop proficiency in matlab and simulink
- Program and troubleshoot drone to compete with a machine learning AI

#### **Rope Traversing Robot**

- Advance additive manufacturing skills, prototyping skills, machine design calculations
- CAD, CAM, slicing software (Prusa) for custom made parts

### **EDUCATION**

**Archbishop Mitty High School** Aug. 2016 - May 2020 • GPA: 3.895

- *Senior Tech Team Lead*, Archbishop Mitty Tech Desk
- *Senior Lead*, Archbishop Mitty Robotics Team Lead

**Loyola Marymount University** Aug. 2021 - May 2024 • GPA: 3.03

- *Research Assistant*, LMU Mechanical Engineering Department
- *Machine Shop TA*, LMU Machine Shop
- *Event Operations Assistant*, LMU Campus Events

### **SKILLS**

Proven Leadership | Efficient Communication | Impeccable Customer Service | Multi-faceted Management | Resourceful Teamwork | Demonstrated Passion & Motivation | CAD and CAM