

# Derick Louie

5238 Brookline Ct, Dublin, CA 94568 • (925) 400-7178 • dericklfl@gmail.com

## EDUCATION

**California Polytechnic State University – San Luis Obispo**

San Luis Obispo, CA

**Bachelor of Science**

2017-2021

**Major:** Mechanical Engineering

**GPA:** 3.60/4.0

**Dublin High School**

Dublin, CA

**Diploma**

2013-2017

**GPA:** 3.67/4.0

Advanced Scholar Diploma

## RELEVANT COURSEWORK

Manufacturing Processes: Material Removal

- Developed skills necessary to operate mills, lathes, and a variety of power tools
- Created and followed production routings to manufacture and inspect parts

Computer Integrated Manufacturing

- Used various CAD programs to design and create parts using processes including laser cutting, 3D printing, and CNC milling

## EXPERIENCE AND PROJECTS

**Team Lead**

*May 2017 – Present*

**MailCheck**

- 2017 Dublin High School Entrepreneur Project Innovative Thoroughness Award
- Created and presented device that would notify users through a text message when they received mail in their mailbox
- Delegated tasks, scheduled meetings, and contributed to the mechanical, electrical, and programming portions of the project

**Teen Tech Volunteer**

*June 2015 – August 2015*

**Dublin Library**

- Assisted users with tasks such as troubleshooting computers and downloading e-books
- Improved communication skills by giving hands-on demonstrations on how to use various pieces of technology

## CAMPUS INVOLVEMENT

**Active Member**

*October 2017 – Present*

**ASME Student Design Competition**

- Analyzed competition and brainstormed with team to develop goalie design for robot soccer competition
- Used CAD software to create multiple iterations and build prototypes while meeting design review and competition deadlines

**Active Member**

*September 2017 – Present*

**Cal Poly Robotics RoboCup**

- Multidisciplinary project involving close collaboration between hardware, electrical, and software teams
- Designed and began manufacturing of drivetrain for RoboCup small size league robot
- Assisted with sourcing of parts and integration with other subsystems

**Participant**

*March 2014 – June 2017*

**Engineering and Design Academy**

- Scheduled monthly meetings with an industry mentor to seek insight on work in the engineering field and help with personal projects
- Enrolled in a series of fundamental and specialized classes to expand knowledge on engineering topics and gain skills such as CAD, drafting, and manufacturing.

**Vice President | Team Captain**

*June 2013 – April 2017*

**Gael Force Robotics VRC Team**

- 15 awards accumulated over 4 years, including awards from the state and world championships
- Qualified to and participated in the world championship all 4 years
- Engaged with teams around the world by creating robot reveals and collaborating through online communities
- Thoroughly documented design process each meeting using a design notebook
- Fundraised by launching crowdfunding campaigns and contacting companies for grants

## SKILLS

- Autodesk Inventor Certified Professional
- Autodesk Fusion 360
- Solidworks
- CorelDRAW
- Microsoft Office
- Languages: English (native), Cantonese (native), Mandarin (conversational)
- Rapid Prototyping
- Machining
- Drafting
- Design for Manufacturability
- Java