Daniel Rhyoo

danrhyoo@tutanota.com
danielrhyoo.com

2448 Teasley Street
La Crescenta, CA 91214
(213) - 631 - 6944

EXPERIENCE

WET Design, CA

Product Development and Engineering Intern

JUNE 2016 – AUGUST 2016

- Designed and machined a variety of new experimental valves that emphasized simple mechanisms and low cost
- Created and programmed remote data logging devices to oversee and monitor test rigs for extended periods of time
- Designed and prototyped a full redesign of an existing product that lowered cost and ease of serviceability/installation with two team members

Freelance

PRESENT

- Designed and machined custom carbon fiber quadcopter frames for clients
- Designed a lightweight front end (UI/UX) of client's website that required user login, searching for other users, and group selection
- Fixed broken electronic devices (iPhones, laptops, etc)

LEADERSHIP EXPERIENCE

IFE: Formula SAE Electric Team

AUGUST 2016 – PRESENT

Suspension & Chassis Subsystem Member (2016 - Present)

- Pioneered use of topology optimization software, Inspire, in the team to maximize stiffness on bell cranks (Weight saving: ~45% from base model)
- Designed and manufactured an A-arm welding jig that uses tube clamps and waterjet baseplate
- Designed and manufactured a custom carbon fiber steering wheel that integrates a quick-release phone as the primary LCD

CVHS FRC Robotics Team 589

AUGUST 2014 – JUNE 2016

Robot Captain & CAD Team Lead (2015 - 2016)

- Managed and oversaw a team of 120+ members in the manufacturing and testing of a robot
- Organized and lead a team of CAD students in the design of a robot that had to circumvent multiple obstacles such as rough terrain and draw bridges

FIRST Mentor (2014 - Present)

- Volunteered to lead and mentor students at Monte Vista Elementary School about Lego robotics, teaching them skills such as programming and robot to inspire future STEM students

PROJECTS

Foldable, In-Hub Motor Longboard (2016)

- Design only, worked in 4-person team for ME170 Final Design Project using Creo 3.0
- Motor designed to be direct drive and housed in rear motors

Electric Longboard (2016)

- Longboard that can go over 20mph and up to ~12mi
- Motor plate designed with full adjustably with quick setting mount

Brushless DSLR Gimbal (2015)

- Carbon fiber gimbal that can stabilize a camera up to 1.5kg in 2-axis
- Open sourced the parts and build guide online where it received over 50k views

NFC Door Lock (2015)

- Rapid prototyped wireless door lock made in a weekend that attaches to most deadbolt locks

USB Data Ring (2014)

- Created a wearable tech that blended both art and portability
- 3D printed as a prototyped then casted in silver, holds a modified USB drive

EDUCATION

University of Illinois at Urbana-Champaign

EXPECTED GRADUATION:
MAY 2020
B.S. in Mechanical Engineering
GPA: 3.73

AWARDS

Outstanding Achievement Award for Excellence in Engineering Design

ME170 CAD Design Award
by UIUC MechSE

SKILLS

CAD
Solidworks
Creo 3.0
Inventor

CAM
Experience in a machine shop (Mill, Lathe, CNC, Waterjet, etc)
Intelli-Max CAM
InventorCAM
SolidCAM
SheetCam

Analysis
Solidthinking Inspire
Solidworks FEA

Programming
Java
HTML/CSS
C++
JavaScript

3D Modelling
Autodesk Maya

Design
Adobe Creative Suite

LANGUAGES

English
Korean