

Jason Cheung

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Education & Honors

University of California, Berkeley

Bachelor of Science, Mechanical Engineering, GPA: 3.53

Berkeley, California
August 2014 - May 2018

Honors: 1 of 5 Charles & Daisee Seffens Scholarship recipients, for distinguished students pursuing a Mechanical Engineering degree at UC Berkeley

Coursework: Manufacturing and Tolerancing, Statics, Rapid Prototyping, MATLAB, Multivariable Calculus, Linear Algebra, Differential Equations

Engineering Experience

National Instruments and Autodesk Joint Lab at UC Berkeley

Mechanical Engineering Intern, Machinist

Berkeley, California
May 2015 - Aug 2015

- **Goal:** Create and validate a workflow to virtually simulate control code on an Autodesk Inventor model with LabView.
- Lead the design, simulation, and building of a 3 mass slider crank & modeling of a go-kart's drivetrain and steering
- Used Inventor's dynamic simulation to determine how strong of a motor and coupling we would need for the slider crank.
- Wrote a LaTeX document describing our successes and failures to help sponsors understand what we need from them
- My work was featured at NIWeek 2015's Academic Keynote, Desktop Engineering, Design World, KXAN News (NBC)

Inertial Storage And Recovery (INSTAR) Lab

Undergraduate Research Assistant, Machinist

Berkeley, California
February 2015 - Present

- Expo'd at the annual National Instruments "NIWeek 2015" in Austin, Texas where I talked to over 5,000 engineers and the NI Vice President of Academic Product Marketing
- Analyzed the current condition of how the energy storing flywheel on the electric go-kart was mounted, and provided solutions to the drawbacks, taking into account vibrations and the 200kJ at 25,000RPM
- Designed, manufactured, and built a shipping box that isolates the kart from road vibrations using foam.

UC Berkeley Formula SAE

Suspension, Driver, Machinist

Berkeley, California
September 2014 - Present

- Currently designing next year's steering assembly, rockers arms, carbon fiber push and tie rods.
- Outlined the usability issues I found with our 2015 suspension tuning methods and designed solutions and methodologies to remove any ambiguity and difficulties with tuning the suspension assembly.
- Designed and performed stress analysis on an infrared temperature sensor mount.
- Designed, manufactured, and tested a push/pull bar for the car that we successfully used at competition
- Performed Die Penetrant Inspection on potentially fatigued parts, checking for microfractures, also taught other members the theory behind DPI, and how to perform it.

Bike Energy Generator

Lead Mechanical Engineer

Berkeley, California
August 2015 - Present

- **Goal:** Use the pedaling energy of a biker to charge a Zendure A2 battery pack which can charge through to any device through USB.
- Currently prototyping the first version and tweaking the packaging to make it universal among bikes

L-3 Communications: Power Paragon

Mechanical Engineering Extern (NDA signed)

Anaheim, California
January 2015

- Shadowed and supported 3 mechanical engineers by performing tolerance analysis, checking drawings, summarizing data sheets, and creating engineering change reports while familiarizing myself with the industry SOP
- Discovered a usability issue with an electromechanical assembly that would have prevented proper functionality.

Auto Sports Haus

Assistant Mechanic

Alameda, California
August 2012 - August 2014

- Upgraded and maintained air intakes, brake systems, and suspension.
- Familiarized myself with many components, tools, and practices which gave me a headstart in my work with Formula SAE

Entrepreneurial Work

Greek Social

Director of Design, Front End Developer, Co-Founder

Berkeley, California
October 2014 - May 2015

- 1 of 5 startups accepted (50+ applicants) into the 2015 Spring batch of a UC Berkeley startup incubator: Free University
- Managed what the site could be used for, speaking to potential users, leading the front end development of those features.

Skills

Skills: Solidworks (100hr+)[modeling, FEA], Inventor (100hr+)[modeling, FEA, dynamic simulation, rendering], AutoCAD (50hr+), Mill (50hr+), CNC(5hr+) Lathe (20hr+), HTML5/CSS (100hr+)