

# Benjamin Chia

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## EDUCATION

University of California, Davis  
*B.S. Mechanical Engineering*  
GPA: 3.4/4.0

Expected Graduation: June 2019

- Engineering Coursework: Statics, Properties of Materials, Programming & Problem Solving, Engineering Graphics in Design-SolidWorks, Differential Equations

## COMPUTER PROGRAMMING AND SIMULATION MODELS

**Crossbow Model & Gyroscope Model**, Engineering Graphics in Design

Feb-March 2017

- Modeled crossbow and gyroscope within Solidworks CAD Software.
- Checked for physical interference of individual parts to ensure the proper mating of final assembly.

**Personal Website ([bjchia.github.io](https://bjchia.github.io))**

April – August 2017

- Utilized HTML, CSS, & JS (self-taught) using Bootstrap framework to host website.
- Developed well-versed proficiency with front-end web development.

**InHealth**, CalHacks 4.0 Project (In Progress)

Oct. 2017 – Present

- Designed prototype of Chrome Extension that reminds users to take breaks from computer use with various types of exercises based on user-selected preferences.
- Currently implementing various APIs to personalize workout videos to individual users.

## EXPERIENCE

**Engineering Peer Advisor- Internship and Career Center**

Sep 2017-Present

Davis, CA

- Automate data entry and parsing of company listings into filters for career opportunities utilizing Excel and VBA.
- Review resumes and cover letters of engineering students while providing feedback.
- Manage career workshops and inform students of career opportunities in engineering.

**Mechanical Engineering Intern-Regional San**

Jun 2017-Present

Elk Grove, CA

- Validate monthly, semi-annual, and annual discharge monitoring reports through analysis of quality assurance data systems (QA/QC).
- Automate data validation and entry of plant data pulled from various data servers utilizing VBA.
- Simulate processes of in-construction facilities in AutoCAD to explain new plant operations.
- Perform data collection from field servers to generate reports for EPA compliance.

**Undergraduate Research Assistant-Sports Biomechanics Lab**

April-August 2017

Davis, CA

- Facilitate the experimental procedure and testing of routine bicycle inertia handling experiments with another graduate student.
- Measure variance in bicycle handling control by shifting center of mass at different length/weights.

**Data Analytics Research Internship- Molecular Medicine Research Institute**

Jun-Aug 2015

Sunnyvale, CA

- Wrote and presented detailed fifteen-page technical paper of experimental procedure and results on gene mutations.
- Collected data and analyzed results using cAMP software and Excel software.

## SKILLS

- Programming Languages: Visual Basic for Applications (VBA), MATLAB, C
- Web Development: HTML/HTML5, CSS, JavaScript, Bootstrap Framework
- CAD Design Software: AutoCAD, SolidWorks
- 3-D Printing: KiSSlicer, Repetier-Host
- Fluent in Mandarin (Bi-lingual)

## EXTRACURRICULAR ACTIVITIES

- Formula Racing Design Team, UC Davis 2016-2017  
○ Composites Sub-Team: Formed and casted carbon fiber, fiberglass, and plastic for vehicle body.
- Theta Tau- Professional Co-Ed Engineering Fraternity, *Historian* 2016-Present
- Additional Interests: Basketball, Weightlifting, Reading, Shoes, UI Design