

# Benjamin Ulrich

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## EDUCATION

### University of California, Berkeley

Berkeley, CA

Computer Science Major (Cumulative GPA: 3.957)

August 2017 – May 2020 (Expected)

**Relevant Courses:** Data Structures, Machine Structures, Designing Information Systems and Devices, Discrete Math and Probability Theory, Multivariable Calculus, Structure and Interpretation of Computer Programs

**Organizations:** Berkeley Triathlon Club, Chi Psi Fraternity, Associated Students University California

### Washington High School

Fremont, CA

Unweighted GPA: 3.9

August 2013 – May 2017

ACT Score: 33

## WORK EXPERIENCE

### UCSF Imaging Center

San Francisco, CA

Undergraduate Research Apprentice

September 2018 - Present

- Working with FIESTA MR images to detect fat in bone structures using image processing techniques such as blob detection
- Programming a method to segment images into bone marrow and cortical bone
- Developing an algorithm to filter out obstructed and damaged image frames

### Vetter Software

Redwood City, CA

Full Stack Intern

May 2018 - August 2018

- Prototyped an offline version of Vetter Software on mobile devices and tablets, utilizing local storage in case of server blackouts
- Integrated into Rest API and OAuth2 to sync local data back to the cloud
- Created a check in app veterinary clinics may use to save time inputting new clients and patients

### 24 Hour Fitness

Fremont, CA

Sales Advisor

June 2017 – August 2017

- Lead in gym membership sales multiple weeks through building rapport with customers and matching their needs with the club
- Generated 10+ leads per day through client outreach and networking practices
- Participated in customer support, frequently helping clients use equipment and recommending workouts

## LEADERSHIP & ACTIVITIES

### ASUC Office of Alexander Wilfert

Berkeley, CA

Intern

August 2017 - December 2017

- Created an outline for a proposed military science minor to give academic credit to ROTC students
- Worked closely with school officials to secure a grant for the renovation of Berkeley's Hearst Gym

### Boy Scouts of America

Fremont, CA

Eagle Scout

August 2010 - May 2017

- Managed troop of over 80 active members by overseeing operations of 8 different committees and conducting weekly meetings
- Coordinated numerous large scale events that included multiple \$10,000 fundraisers and a two week long backpacking trip
- Overhauled our broadcasting system and modernized it through google applications

## SIDE PROJECTS

### Fuel Up

Berkeley, CA

Berkeley Hackathon

November 2018

- Created an iOS directions app that interfaces with Ford vehicles center console
- Automatically reroutes to a gas station when fuel levels are low, taking into account gas type, destination, and cost

### Stereo Imaging

Berkeley, CA

School Project

October 2018

- Compares two images representing views from a left and right eye and returns an image showing distance to each feature
- Written in C and optimized using SIMD instructions and OpenMP

## SKILLS & INTERESTS

**Technical:** Image Processing, Mobile Development, Python, Java, Swift, C, RISC-V Assembly, Scheme, SQL, Logic gates

**Interests:** Traveling, Triathlon, Weightlifting, Eating