Benjamin Ulrich

35584 Linda Drive Fremont CA 94536 | (510)-579-8058 | udotneb.github.io | BenjaminUlrich@berkeley.edu

EDUCATION

University of California, Berkeley   **Berkeley, CA**
Computer Science Major (Cumulative GPA: 3.97)   August 2017 – May 2021 (Expected)

<u>Relevant Courses:</u> Data Structures, Machine Structures, Optimization Models, Introduction to AI, Probability and Random Processes, Designing Information Systems and Devices I & II, Discrete Math and Probability Theory, Multivariable Calculus
<u>Organizations</u>: Berkeley Triathlon Club, UPE CS Honor Society, Intramural Soccer, Chi Psi

WORK EXPERIENCE

Uber Advanced Technologies Group   **San Francisco, CA**
Software Engineering Intern   May 2019 – August 2019
- Used TensorFlow to train a CNN model that detects if people leave objects in a self-driving vehicle, achieving 98% accuracy
- Deployed this model as a Go service in Uber ATG's production infrastructure
- Created a pipeline using S3 for collecting new training images from every ride

UCSF Imaging Center   **San Francisco, CA**
Undergraduate Research Apprentice   September 2018 – May 2019
- Worked with FIESTA MR images to detect fat in bone structures using image processing techniques such as blob detection
- Programmed a method to segment images into bone marrow and cortical bone
- Developed 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 their Rest API and authenticated using 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

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: Python, Java, Swift, Go, C, RISC-V Assembly, Scheme, SQL, Logic gates
Interests: Triathlon, Weightlifting, Eating, Reading