Alexander Walczak

 \checkmark +1 (425) 350-8482 \hookrightarrow awal@berkeley.edu \bigcirc 4lexw

Education

University of California, Berkeley

B.A., Computer Science

Berkeley, CA Fall 2013 - Spring 2017

Work Experience

Google LLC

San Bruno, CA

Software Engineer, YouTube Kids

March 2021 - Present

- Giving kids a fun, accessible experience and parents peace of mind in my work as a developer of the YouTube Kids app.

Apple Inc.

Cupertino, CA

Software Engineer, iOS Accessibility

October 2018 - February 2021

- Creator of the Magnifier app built into iOS, which helps people with visual impairments see the world.
- Collaborated with a team of researchers to make People Detection in Magnifier a usable product that enables blind people to maintain social distancing by leveraging the distance sensors on iPhones.
- Responsible for the accessibility of first-party apps including Home app and TV app.
- Speaker at WWDC 2020: VoiceOver efficiency with custom rotors https://developer.apple.com/videos/play/wwdc2020/10116/

Adobe Inc. San Francisco, CA

Machine Learning Software Engineer, Adobe Sensei & Stock Search

May 2017 - September 2018

- Created a system to serve ML models to drive interactive features in Adobe Stock Search.
- Used AWS SQS queues to parallelize inference and indexing of $> 10^8$ images in the cloud.

Umbo Computer Vision

Taipei, Taiwan

Machine Learning Intern

May 2016 - August 2016

- Developed a prototype of efficient "few-shot learning" in real time.

UC Berkeley EECS & Lawrence Berkeley National Lab

Berkeley, CA

Undergraduate Researcher

August 2014 - May 2017

- Designed and carried out experiments to control the rotation of E. coli flagella in hopes of showing that the rotation patterns could be used as the input to a biosensor which measures the concentration of a sensed substance.
- Learned fluorescent microscopy and 3D printing to visualize and run these experiments in a flow cell of my
- Created a video segmentation algorithm to automate data collection and analysis.

Awards

Huang Scholarship 2016-17, which provided funding to study third-year Chinese in Beijing and intern in Taipei over consecutive summers.

Publications

T. Zajdel, A. Walczak, D. Sengupta, V. Tieu, & M. Maharbiz, "Towards A Biohybrid Sensing Platform Built on Impedance-based Bacterial Flagellar Motor Tachometry," IEEE BioCAS, Turin, Italy. October 2017.