Alex Walczak

Education

University of California, Berkeley

B.A., Computer Science

Berkeley, CA Fall 2013 - Spring 2017

Work Experience

Apple Inc.

Cupertino, CA

Software Engineer, iOS Accessibility

October 2018 - Present

- Creator of the Magnifier app, redesigned for iOS and iPadOS 14.
- Collaborated with research groups to bring their work to production quality for features like People Detection in Magnifier and automatic on-device image captioning in VoiceOver.
- Responsible for the accessibility of first-party apps including Home app, TV app, and Markup.
- 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 for low latency ML model serving to drive interactive features in Adobe Stock Search.
- Developed a process for rapid, parallelized 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.
- Created a video segmentation algorithm to automate data collection and analysis.

Skills

Languages: Swift, Objective-C, Python, C, UNIX Shell

Frameworks: Combine, UIKit, SwiftUI, AVFoundation, GCD, UIAccessibility, Learning: ARKit, Vision

Tools: AWS/cloud computing, Docker, Flask, git, Radar, Terraform, XCTest

Machine Learning: TensorFlow 1 & 2, Torch, PyTorch, GPU

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.

Awards

CITRIS Invention Lab Fellowship, 2016; Huang Scholarship, 2015-2016; Santander Bank Scholarship, 2014

Hobbies

Traveling (to 27+ countries), skiing, hiking, Chinese language, recreational learning

Employment Eligibility

Citizenship: USA, Poland (European Union), Canada