

## Education

**University of California, Berkeley**  
*Bachelor of Arts, Computer Science*

Berkeley, CA  
*Fall 2013 - Spring 2017*

**Fordham University**  
*Post-Baccalaureate Pre-Medical/Pre-Health Program*

New York, NY  
*Spring 2022 - Spring 2023*

## Experience

**Google LLC**  
*Software Engineer, YouTube*

New York, NY  
*March 2021 - Present*

- Developing features on the YouTube Kids iOS app to give kids a fun, accessible experience and parents peace of mind.

**Apple Inc.**  
*Software Engineer, Accessibility*

Cupertino, CA  
*October 2018 - February 2021*

- Created the Magnifier app in iOS, which helps people with visual impairments to see the world.
- As a response to the COVID-19 pandemic, implemented People Detection, which leverages the depth sensors on iPhones to enable blind people to maintain 6 feet of social distancing.
- Made first-party apps including the Apple TV app and Home app accessible to people with visual and motor impairments.
- Delivered a talk at Apple's annual conference WWDC: *VoiceOver Efficiency with Custom Rotors*.

**Adobe Inc.**  
*Machine Learning Software Engineer*

San Francisco, CA  
*May 2017 - September 2018*

- Created a system of serving machine learning models to drive interactive features in Adobe Stock search.

**Lawrence Berkeley National Laboratory**  
*Undergraduate Research Assistant*

Berkeley, CA  
*August 2014 - May 2017*

- Performed experiments to study whether the rotation patterns of *E. coli* flagella can be used as inputs to a biosensor for chemicals around the bacteria.
- Learned fluorescent microscopy and designed and 3D printed a flow cell to observe how different substances affect flagellar rotation.
- Created a video segmentation algorithm to automate data collection and analysis of rotating bacteria anchored to a glass slide in the flow cell.

**Umbo Computer Vision**  
*Machine Learning Intern*

Taipei, Taiwan  
*May 2016 - August 2016*

- Developed a program for realtime few-shot learning that learned to recognize and distinguish new objects and people using a webcam.

## Volunteering

**Park Slope Volunteer Ambulance Corps**  
*Emergency Medical Technician*

Brooklyn, NY  
*June 2022 - Present*

- I volunteer with a 911 EMS unit mainly responding to calls in medically underserved communities of Brooklyn.

## 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.

## Abstracts

T. Zajdel, **A. Walczak**, D. Sengupta, V. Tieu, C. Ajo-Franklin, & M. Maharbiz, “Impedance-Based Electrochemical Readout of Bacterial Flagellar Rotation,” *Biophysical Journal*. June 2016. *Outstanding Poster Award*

## Patents

Dour, Ryan et al. User interfaces for indicating distance. US Patent 11,670,144, filed August 10, 2021, and issued June 6, 2023.

## Awards

### Huang Scholars Program at UC Berkeley

Beijing and Taipei  
*Summer 2015 and 2016*

- Sponsored study of third-year Chinese at the Princeton in Beijing language immersion program one summer and an internship in Taipei the next summer.

### IARU-Santander Global Summer Program Scholarship

Singapore  
*Summer 2014*

- Sponsored study of Southeast Asian culture and history at the National University of Singapore.

## Hobbies

- iOS app development. Layout Studio is an app on the App Store I have been developing for three years.
- Hiking, skiing, and kayaking.