# **Jacob Shandling**

## jacobshandling@icloud.com dev.jakeshandling.com

## Tools & Languages

#### Python • Django • Django REST Framework • JavaScript • React • Webpack • Heroku • S3

## **Projects**

#### Soundseeker.app

- A tool for organizing and juxtaposing musical ideas in the form of short audio recordings
- Front end built with React/Javascript, HTML/ CSS, Webpack; Back end built with Django, Django REST Framework, PostgreSQL; Deployed with Heroku and AWS S3

#### kruskals-as-clustering

• <u>Kruskal's algorithm</u> and the union-find data structure applied to the clustering problem

#### music.jakeshandling.com

- Portfolio for my work as a musician
- HTML, Bootstrap CSS, Javascript

#### Education

#### Select Self-Study

September 2019 - Present

- Documentation-driven study of and building with React, Django, Django REST Framework (2022)
- <u>University of Alberta Online Software Design and Architecture Specialization</u> (in progress, 2022)
- Harvard CS50 Web Programming with Python and JavaScript (2021 2022)
- Stanford Online Algorithms I, II, III, and IV (2020 2021)
- Harvard CS50x (first half, covering C and memory management) (2021)
- MITx Program in Computational Thinking & Data Science Using Python (2019 2020)

#### University of California, Santa Cruz

2007 - 2011

Bachelor of Science - Molecular Biology; Studies in Music Theory & Performance Cum Laude, University Honor, Phi Beta Kappa

#### Experience

## Software Developer - Personal and Group Projects

October 2020 - Present

Remote

- Design and develop open-source full-stack web apps using modern technologies
- Rapidly and thoroughly learn and apply new technologies
- Deploy web apps on industry-standard Platforms-as-a-Service (Heroku, AWS)

#### Software Development Intern - Thring

October 2020 - January 2021

Remote

- Develop the inference engine for an ML-based computer vision model using Python, TensorFlow, and PyTorch
- Collaborate concurrently and remotely with team members, maintaining version control with Git

#### Multi-Instrumentalist, Composer, Educator - Musician

*June* 2006 – October 2020

New York, NY and Worldwide

- Internationally touring drummer and highly regarded educator
- Reputation for elite-level performance resulting in concerts from New York's Jazz at Lincoln Center to the Jazz Gallery for audiences of up to 250,000 in 10+ countries, 20M+ album streams in one year, 500,000+ video views

## $Science\ and\ Mathematics\ Teacher/Tutor-The\ Beekman\ School$

April 2016 - June 2018

New York, NY

- Teach and tutor courses in the natural sciences and mathematics
- Maintain communication among faculty, staff, parents and students

### Research Assistant - The Zahler Lab, UC Santa Cruz

January 2011 – December 2011

Santa Cruz, CA

- Study nuclear rearrangement processes in the ciliated protozoan Sterkiella histriomuscorum
- Develop and optimize protocols for investigation of novel RNA functionality in these processes
- Maintain clear and consistent documentation and communication within a team of researchers