# EMAIL

### **MOBILE**

+1 (310) 600-8638

zane@znd4.me

## **Aspiration Inc**

Senior Software Engineer -Backend Remote January 2022 - Present Ford Motor Company Software Lead Dearborn, MI February 2020 - January 2022

#### **Ford Motor Company**

ML Engineer Dearborn, MI November 2017 - February 2020

## **Disney Imagineering**

Software Engineering Intern Glendale, CA June-September 2017

#### Intel

Software Engineering Intern Santa Clara, CA February-August 2016

## **UC Berkeley**

Research Assistant Computational Geometry Summer 2015 - Fall 2016

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UC Berkeley, May 2017

Relevant Courses

# **Zane Dufour**

I am a software engineer with a background in analytics and machine learning. I'm a huge fan and advocate of python, but I love learning new frameworks and languages (currently golang and lua). As a senior software engineer, I'm equally comfortable leading high-level architecture discussions, pairing with junior devs, and debugging annoying bugs. If you like reading LATEX, feel free to check out the source for this resume.

### **EXPERIENCE**

On the Climate Action squad, I maintained Aspiration's legacy Plant Your Change service while developing new revenue sources during a period of team downsizing. Worked with QA engineers to automate manual QA tasks. Expanded test coverage of critical AWS lambda functions.

As the technical lead of the model-training-as-a-service product team within Ford's Mach1ML platform organization, I drove adoption of modern python development tools (poetry/pipenv, black, pre-commit, tox, etc.). Advocated the replacement of flask with fastapi for REST API development — contributed a fastapi template to Ford's project bootstrapping tool. Implemented faster process for the approval of open-source python packages. Worked with tech leads for other product teams to plan inter-team integrations. Led the early development and design of the platform's python SDK. Worked hands-on with internal customers to onboard production Machine Learning use-cases.

Developed likelihood-to-purchase models for tens of millions of individuals. Helped the team adopt Github for version control. Created a python package to streamline the process of utilizing pyspark computing resources. Helped team adopt test-driven-development and static code analysis for our python libraries and flask services.

While working in the Disney Imagineering Media and Art Pipeline group, I developed software used for projection mapping in Disney parks and resorts. I built a continuous integration system for multiple interdependent applications which were used for different parts of the projection mapping pipeline.

During this six month internship at Intel, I worked on a desktop application for technicians to work with manufacturing robots. While on the team, I added an exception-handler and a sqlite-based logging system for tracking test metadata. This was the first time I worked in a large code base and learned to write maintainable code.

While working as an undergraduate research assistant, I worked on a spectral geometry morpher in C++ and a Houdini tool for generating parameterized geometry.

#### **EDUCATION**

Double Bachelor's – Applied Math and Physics GPA 3.4

Intro to Computer Science, Machine Learning, Spectral Methods in Computational Fluid Dynamics (Graduate), Advanced Linear Algebra, Analytical Mechanics