Zane Dufour

MOBILE +1 (310) 600-8638

EMAIL

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

UC Berkeley, May 2017

Relevant Courses

I am a software engineer with an analytics and machine learning background. I'm a huge fan and advocate of python, but I love learning new frameworks and languages. 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 (not yet public) revenue sources during a period of team downsizing.

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