# Zane Dufour

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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 tech lead, I've been equally comfortable leading high-level architecture discussions and pairing with junior devs, debugging annoying bugs. If you like reading LaTeX, feel free to check out the source for this resume.

## EXPERIENCE

**Ford Motor Company**
Software Lead
Dearborn, MI
February 2020 - Present

As the technical lead of the modeling-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.

**Ford Motor Company**
ML Engineer
Dearborn, MI
November 2017 - February 2020

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.

**Disney Imagineering**
Software Engineering Intern
Glendale, CA
June-September 2017

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.

**Intel**
Software Engineering Intern
Santa Clara, CA
February-August 2016

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.

**UC Berkeley**
Research Assistant
Computational Geometry
Summer 2015 - Fall 2016

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

UC Berkeley,
May 2017

Double Bachelor's – Applied Math and Physics
GPA 3.4

Relevant Courses

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