# **Zane Dufour**

**MOBILE** 

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I intend to pursue software engineering positions.

**EMAIL** 

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## **Ford Motor Company**

Software Lead Dearborn, MI February 2020 - Present

## **Ford Motor Company**

Analytics Developer 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

# **EXPERIENCE**

As the technical lead of the modeling-as-a-service product team within Ford's Mach1ML platform organization, 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 development and design of the Mach1ML python SDK.

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 accessing pyspark computing resources. Successfully encouraged team to 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 developed manufacturing and design tools for the Silicon Photonics group. While on this team, I added an exception-handler and a sqlite logging system. This was the first time I maintained a large code base and learned about writing reusable 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.

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### **EDUCATION**

Double Bachelor's – Applied Math and Physics GPA 3.4

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