

# DREW FUSTIN

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PhD '12  
University of Chicago  
Particle Astrophysics / Dark Matter

Data leader with over a decade of startup experience building data organizations and developing machine learning products: infrastructure + feature engineering + model training + service deployment. Looking to build something great.

## SELECTED EXPERIENCE



### Senior Director of Data Science

#### Principal Machine Learning Scientist

Jan 2022 - Mar 2024

soon

- mgmt: founded data analytics, data science, data engineering, machine learning engineering, and computer vision (8 directs)
- Owned decisions on personnel, roadmap, technology, budget, and related
- Designed cloud architecture and wrote infrastructure-as-code to manage deployment of all data resources within secure networks
- Automated image post-processing by training various neural nets for transformations (e.g. white balancing) and deployed as a REST API
- Leveraged diffusion models for in- and out-painting around customer products within images to augment product details and backgrounds
- Built custom accounting system to process revenue recognition
- Centralized data sources in ELT pipelines to provide single-source-of-truth data definitions for analytics consumption
- Redefined company-wide KPIs to optimize decision-making
- Created data dashboards displaying KPIs for all departments in the company



### Director of Data Science

OPENLANE | KAR Global | DRIVIN

Jul 2019 - Dec 2021

- mgmt: computer vision, machine learning engineering (10 directs)
- Revamped interview process, career leveling, salary bands, and job definitions
- Built vehicle repair optimization / recommendation engine worth ~\$5m/yr in added in-house repair work sold (purchased by Carvana)
- Managed development and deployment of image segmentation service for PII and background removal and mobile client-side content quality scoring library
- Created internal suite of computer vision demos to showcase development progress and image processing capabilities to business stakeholders



### Founder / Independent Consultant

Sage Array

Jan 2018 - Jul 2019

- Built data warehouse and analytics process for retail and insurance startups
- Wrote structured report generation UI for a medical imaging startup



### Lead Data Scientist

SpotHero

Aug 2015 - Nov 2017

- mgmt: founded data science, data engineering (2 directs)
- Created ETL pipelines, data warehouse, and analytics platform
- Built marketing attribution and LTV model for ~\$1m/mo spend
- Modeled elasticity for dynamic pricing algorithm and inventory optimization
- Forecasted rental activity and churn probability to assess customer LTV



### Insights Analyst

Grubhub

Mar 2013 - Aug 2014

- Co-created data journalism program (3x YoY brand mentions)
- Produced white papers surveying the effects of delivery fees on revenue
- Developed an isochrone algorithm to optimize delivery boundaries

## SPECIALTIES

Greenfield data science and engineering

Creating impactful data organizations

Data product management

Building data products end-to-end

ML / CV / AI service deployment

Data pipelines, warehousing, ELT

MLOps and infrastructure-as-code

Computer vision

Probabilistic programming

Democratizing data analytics

Fighting for the good of my team

Networking in the tech community

Googling things I don't understand

Mixing a really good cocktail

## TOOLS OF CHOICE

**Python:** PyTorch, pandas, scikit-learn, PyMC3, Dask, FastAPI, similar

**Tooling:** dbt, Airflow, H2O.ai, Looker, Jupyter, Plotly, Airbyte, Segment

**Deploy:** Docker, Kubeflow, SageMaker

**DBMS:** SQL, Redshift, Snowflake, MongoDB

**IaC:** Terraform, CloudFormation

**CI/CD:** CircleCI, Jenkins

**Cloud:** AWS, GCP

**Project:** Agile, Kanban, Jira

## WHAT IS IMPORTANT TO ME

Opportunity to help build a great data science/engineering organization

Engaging problems to work on that make a real impact on the business

Nurturing environment for learning, experimentation, and ingenuity

A culture committed to diversity and eliminating inequality in engineering

Work-life balance to spend time with my wife, three children, and dog