# SEPEHR SADIGHPOUR

#### SENIOR DATA ENGINEER

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(510) 759-4850 Oakland, CA

#### Profile

I enjoy helping socially-conscious organizations make innovative use of data. My experience as a data engineer, ML engineer, and web developer, enable me to understand complexities of data and ML pipelines across the entire stack.

## Strengths

## ML DevOps

Creating workflows for data scientists to rapidly train, interpret, productionize, and monitor ML models.

# **Data Engineering**

Building ETL and ML pipelines using Spark and SparkML. Empowering analysts to validate data quickly and surface insights.

#### **Data Science**

Implementing appropriate ML algorithms to solve a variety of business challenges.

## Experience

## Clarify Health Solutions

Nov 2017 - Mar 2020

#### Senior Data Engineer

Built Spark pipelines for data validation, feature engineering, and model training on 10s of billions of rows of healthcare claims data.

Sped up model training 20x, enabling scaling to thousands of models per day.

Architected an extensible, scalable, and efficient service for training and organizing hundreds of thousands of models, serving predictions and model interpretations in batch and real-time modes. Managed external team of developers in charge of implementation.

Designed statistical metrics for detecting data drift.

## Omada Health

Apr 2016 - Jul 2017

#### Data Scientist

Guided product direction via analyses of trends in participant behavior, leading to 6% lift in user engagement Designed and implemented A/B tests for new features in close collaboration with designers

Managed 4-person data team's research into areas such as chatbots, reinforcement learning, and machine vision

## BayThrive

Jan 2010 - Apr 2016

#### Owner, Developer, Project Manager

Increased traffic 20x and conversion rates 4x for biotech sales firm through SEO and iterative design Built development and production infrastructure for early-stage startup using Docker and Ansible Developed heuristic for financial research firm to estimate degree of self-similiarity in time-series data

# Mepkin Abbey

Jun 2008 - Jan 2010

#### Webmaster, Go-To Guy

Directed development of custom registration system from need-assessment to hiring and project management Built website, e-commerce solution, and established processes for inventory management and online sales

#### Education

# Galvanize University

Oct 2015 - Jan 2016

#### Data Science Fellow

<u>Capstone Project</u>: Built information-retrieval app for discovering scientific articles by semantic similarity using document vectors

# **Duke University**

Class of '08

#### Bachelors of Science, Physics

Capstone Project: Trained neural networks and genetic algorithms to solve energy states of quantum systems

# Technical

Modeling: Spark ML, scikit-learn, H2O, Vowpal Wabbit, LIME

NLP: Spacy, gensim, fastText, WordNet, NLTK

ETL: Spark, Airflow, Luigi

Infra: Terraform (AWS EMR, Batch, ECS, S3, Redshift), Docker

Software: Flask/Django, PHP, git, bash, RESTful API design, some JS Viz: Plotly, leaflet.js, seaborn, some

Analysis: Pandas, R, SQL (Postgres, Presto)

Experimentation: Experiment design, multi-armed bandits

D3.js