# **Ladan Doroud**



## **EDUCATION**

### University of California, Davis

PhD in Computer Science Dissertation: Network Analysis in Microbial systems

**2013 - 2017** 

# University of California, Davis

M.Sc. in Computer Science

**==** 2010 - 2013

# Shahid Beheshti University

B.Sc. in Computer Science

**2006 - 2010** 

# SKILLS

Programming: Python, Bash, SQL, (some) R, (some) Perl, (some) C++

Data Analysis: scikit-learn, pandas, networkx, NLTK, scipy, (some) pytorch

Big Data: Hadoop, (some) spark

Analytics: ETL, SQL, Django, dbt, Google BigQuery, Metabase

**Tools:** Jupyter notebooks, sagemaker, Slurm, Airflow, Rshiny

# **Awards**

Patents: Community assignments in identity by descent networks and genetic variant origination

Google Code Jam: Won Google Code Jam to I/O 2016 contest for Women

Fellowship: UCD Graduate Research Fellowship (Spring 2015, Winter 2017)

# **WORK EXPERIENCE**

#### Color.com Data Scientist

Jan 2020 - March 2023

- Developed polygenic risk scores (PRS) at color I exclusively owned end-to-end lifecycle of this project, starting from R&D (leveraging UK biobank, dbGaP, PGS catalog), genomic imputation, data and statistical analysis and modeling, clinical validations, productionizing and supporting ETL, reports and dashboards for analytics
- Built a cross functional data team (resume screening, hiring, mentoring) and created team roadmaps and OKRs. Additionally I recruited and interviewed 50+ applicants for scientist, analytics engineering and data analytics positions.
- Supported and maintained ETL (Google BigQuery), dbt transformation, developed new django-based tasks and aided analytics team with dashboards
- Hands on work in the following customer-facing products: All Of Us, COVID testing, Essential Care, PRS
- Writing and contributing to publications, developing interactive webapps and external collaborations with many academic institutes.

#### **Ancestry.com** Staff (Genomics) Data Scientist April 2017 - Dec 2019

- Extensive algorithm and software development to analyze more than 17M+ customer's genomics data
- Developed machine learning techniques to predict phenotypes based on genotype data
- Project management and hands on experience for multiple core products: Genetics communities, Matching, etc
- Contributing to publications and patents

# AnimalBiome CoFounder

2016

• Built business development plans as well as prototyping the initial software to analyze the data. Received 250K seed funding from IndieBio

#### AncestryDNA Internship

June 2015 - Sep 2015

• Analyzing large scale networks (community detection) to find novel hierarchical IBD clusters among 1M customers and developing an efficient pipeline (using Hadoop) for haplotype matching

#### **Udacity, Inc** Internship Course Manager

June 2014 - Sep 2014

• Maintained and created the materials for following online courses: Hadoop and Map Reduce, Data Science, Exploratory Data Analysis, Statistics