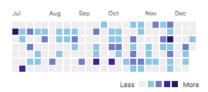
# Doug Sherman



(508) 479 -7975 237 Markham Ave. Vacaville, Ca. 95688 desherman@ucdavis.edu math.ucdavis.edu/~dsherman Github.com/dsherma7 LinkedIn.com/in/dsherman-89



267 Github contributions in the last year

# **SKILLS**

### **PROGRAMMING**

Proficient:

R • Matlab • Bash

Intermediate:

 $C++ \bullet Python \bullet HTML \bullet JS$ 

Familiar:

Java • MySQL • C#

# **EXPERIENCE**

#### **FORAGE GENETICS INT. I SENIOR SYSTEMS TECH**

June 2016 - Present | Davis, CA

Google Cloud • Tableau • MySQL • HTML • R • Python • Javascript • Java • Bash

- Lead the development of data science and bioinformatics tools leveraging Tableau and the Google Cloud platform with users throughout the country
- Lead the development of a Java based laboratory management system for tracking and analyzing a high volume of qPCR data in our in-house laboratory
- Responsible for all the data analysis including building QTL, GS, and GWAS
- Constructed a Polyploid dosage calling algorithm by combining semi-supervised and supervised machine learning models
- High throughput lab analyses automated with cron
- Full stack development of locally hosted server for UI; including the hardware

### UNIVERSITY OF CALIFORNIA - DAVIS | TEACHING ASSISTANT

Sept 2017 – Present | Davis, CA

- $\mathsf{HTML} \bullet \mathsf{CSS} \bullet \mathsf{Bootstrap} \bullet \mathsf{JS}$ 
  - Developed a webpage for hosting useful tools in assisting the students' learning
  - Taught Multivariable Calculus in the Math department this Fall, and will teach in the Winter (40-50 Students)

# UC DAVIS BIOINFORMATICS CORE | UNDERGRADUATE RESEARCHER Oct 2016 – June 2017 | Davis, CA

Python • Bowtie • BWA • Samtools

- Microbial Community Analysis of microbiota across the 16S gene
- Used deep learning as an alternative to current microbe genome classification
- Developed a novel alignment algorithm that trains on sequence CIGAR strings

# **GENOME & BIOMEDICAL SCIENCES FACILITY** | RESEARCHER Feb 2016 - July 2016 | Davis, CA

C++ • Matlab

- Researched multiple Machine Learning models including LWPR, LWR, Gaussian Processes, and Neural Networks.
- Performed optimal experimental design (active learning) through feature space uncertainty queries

## **FDUCATION**

### **COMPUTER SCIENCE, M.S.** | JUNE 2018 (EXPECTED)

University of California - Davis | GPA: 4.00

Deep Learning • Computer Architecture

#### MATHEMATICS (COMPUTATIONAL), B.S. | JUNE 2017

University of California - Davis | GPA: 3.96

Non-Linear Optimization • Numerical Analysis • Stochastic Processes

### **COMPUTER SCIENCE, B.S.** | JUNE 2017

University of California - Davis | GPA: 3.92

Machine Learning • Computer Vision • Data Science