

# ALEKS TARANOV

## Data Scientist



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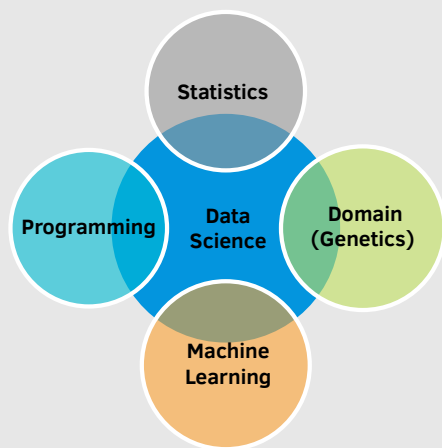
/in/alekslovesdata



alekslovesdata

## Technical Skills

### Overview



### Programming

Low —————> High

R • C++ • Python

Octave • MATLAB •  $\text{\LaTeX}$

Alteryx • KNIME • SQL

## Education

### MSc., Statistical Genetics

Department: IAD

University of California, Davis

2017 - 2019 | Davis, CA

### BA, Environmental Studies

Department: Anthropology

Princeton University

2011 - 2015 | Princeton, NJ

## EXPERIENCE

Mar 2019 -  
current

### Adjunct Professor of Data Science

University of San Francisco

- Teaches course on data visualization in python to 80 masters students in the MSDS data science program
- Developed curriculum focusing on interactive visualization using python packages such as plotly, bokeh, and altair.

Sep 2018 -  
Dec 2018

### Biostatistician

Bayer Cropscience

- Developed machine vision approach to do image processing and classification on outputs of caterpillar images from microplate photometers
- Trained data science team on how to make an R package in order to build a new protocol for sharing R functions
- Wrote internal R package shared on BRAN for accessing and processing field trial data from external database SCOUT
- Explored statistical methods for MIC analysis and LD50 so that bench scientists could analyze their dose curve response data

Sep 2018 -  
Mar 2019

### Graduate Researcher

Runcie Lab, UC Davis

- Wrote masters thesis reviewing machine learning applications for plant breeding under the supervision of Dr. Runcie.
- Ran R scripts on a computer cluster with SLURM in order to test the effectiveness of a new machine learning approach against standard BLUP approaches
- Analyzed output from these scripts and compared to outputs from genomic selection scripts written by CIMMYT researchers

Feb 2018 -  
Jul 2018

### Research Intern: Software Engineer

CIMMYT

- In a team of 2, raised \$6,263 in funding from The Tech for Social Good Competition and RIFA to develop an R package at CIMMYT
- Worked in the Biometrics and Statistics Unit to convert the R code in the ISQG package to C++ for increased efficiency
- Helped plant breeders across divisions improve their proficiency in R

Sep 2017 -  
Jun 2018

### Graduate Researcher

Dr. Fushing, UC Davis

- Created R package that uses a clustering algorithm to create possibly gapped histograms
- Also worked on developing an ANOHT or Analysis of Histogram Analysis as a potential alternative to ANOVA analysis
- Part of larger project to develop new machine learning methodologies as alternatives to standard statistical methods, for histograms, time series analysis, etc.

## TEACHING

Jun 2018 -  
Present

### Certified Instructor

Data Carpentry, Software Carpentry

- Taught workshops on dplyr and tidyr at the 2-day Data Carpentry Workshop at UC Davis in June 2018
- 2-day Data Carpentry training at Genentech Aug 27-28, 2018
- Taught 2-day Data Carpentry training at UC Davis Jan 3-4, 2019

Sep 2018 -  
Present

### Teaching Assistant

UC Davis

- Graduate level statistics course PLS 205 Experimental Design
- Graduate level seminar IAD290 on project management
- Undergraduate course PLS100 CL Environmental Interactions