# Sidney Le

Data Scientist

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(408) 981-9036
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## CAREER OBJECTIVE

Data scientist with experience problem-solving in many research domains, from sociology to housing to health. Strong background in statistics and skilled at communicating data and concepts. Hoping to make the world a better place.

## TECHNICAL SKILLS + SOFTWARE

- **ML/DL**: scikit-learn, keras, tensorflow, pytorch, SparkML
- NLP: NTLK, gensim, BERT
- **Python**: numpy, pandas, matplotlib/seaborn
- **R**:tidyverse, ggplot2, shiny, rmarkdown
- Data: Spark, SQL
- **BI**: Tableau, Excel, PowerPoint
- Version Control: git, github

### PROFESSIONAL EXPERIENCE

# EDUCATION

**University of California, Berkeley –** *Berkeley, CA* Bachelor's, Statistics January 2015 – December 2018

*Relevant coursework:* Population Analysis, Advanced Linear Algebra, Probability, **Statistics**, Matrices and Graphs, **Social Network** 

Analysis, Computer Program Structure, Linear Modeling, Machine Learning, Time Series Analysis, Text Analysis, Collaborative Data Science

#### Data Scientist – Dascena, Oakland, CA / June 2018 – Feb 2020 (1 year as DS + 7 months as DS intern)

- Designed and implemented experiments utilizing machine- and deep-learning in **Python** to leverage large-scale clinical EHR data, including unstructured text, and drive novel health research
- Wrote and published technical papers (see below) to demonstrate novelty and significance of experimental results; developed technical aspects of grants to fund large scientific and engineering projects
- Managed and processed large-scale clinical EHR data for use in analysis using a **Linux** machine on the **AWS** cloud computing platform, **MongoDB**, and **PostgreSQL**
- Worked across teams, including engineering and sales, in order to communicate data needs and uses
- ML/DL techniques applied include: transfer and semi-supervised learning, RNNs and CNNs (implemented in Keras and Tensorflow), NLP, XGBoost

Research Associate – Goodly Labs, Berkeley, CA / Feb 2018 – Jan 2019 (1 year)

- Worked with teams of sociologists and students to develop research and social good products
- Led project development and determined technical goals and timeline
- Developed machine-learning pipeline utilizing clustering and NLP to extract sociological insight from user-generated data in R
- Managed and iterated user platform for generating data

#### Undergraduate Student Instructor (Data 8) – UC Berkeley, Berkeley, CA / Aug 2018– Dec 2018 (5 months)

- Taught introductory data science as an instructor in one the largest data science university courses in the country
- Responsibilities included: developing course material; conducting discussion and lab sections, office hours, and exam prep sessions; and advising students on data science as an interdisciplinary field of study

Data Consultant – SUSA at UC Berkeley, Berkeley, CA / Aug 2017 – May 2018 (10 months)

- Built predictive models for localized food need in collaboration with the Alameda County Community Food Bank
- Analyzed affordable housing needs/policy, developed indicators and maps for CTSP Data for Good competition, placed 2nd

# SELECTED PUBLICATIONS

- Le, Sidney, et al. "24: EFFECTS OF MONOCYTE DISTRIBUTION WIDTH AND WHITE BLOOD CELL COUNT ON A SEPSIS PREDICTION ALGORITHM." Critical Care Medicine 48.1 (2020): 12. doi: 10.1097/01.ccm.0000618596.05438.08. Recipient of the SCCM Star Research Achievement Award.
- Le, Sidney, et al. **"Pediatric Severe Sepsis Prediction Using Machine Learning."** *Frontiers in pediatrics* 7 (2019): 413. doi: 10.3389/fped.2019.00413.
- Barton, Christopher, et al. "Evaluation of a machine learning algorithm for up to 48-hour advance prediction of sepsis using six vital signs." *Computers in biology and medicine* 109 (2019): 79-84. doi: 10.1016/j.compbiomed.2019.04.027.