

# Shivaram Yellamilli

shivaramyellamilli@berkeley.edu | (408) 401 - 6524  
<https://www.linkedin.com/in/shivaramy/>

## EDUCATION

### UC BERKELEY

BA IN APPLIED MATHEMATICS

December 2019

GPA: 3.66/4.00

## SKILLS

### PROGRAMMING

Python, Java

### COMPUTER

SQL, Git, Jupyter, Docker,  $\LaTeX$

### LIBRARIES

Sklearn, Numpy, Scipy, Pandas,  
Matplotlib, Seaborn, Gensim,  
Tensorflow, Keras

## COURSEWORK

### DATA SCIENCE

Data Science with Applications  
Machine Learning Fundamentals\*  
Data Structures & Algorithms  
MySQL Bootcamp\*  
Computational Techniques in Physics

### MATHEMATICS

Numerical Analysis  
Complex Analysis  
Real Analysis  
Abstract Algebra  
Linear Algebra  
Combinatorial Topology  
Multivariable Calculus

### ENTREPRENEURSHIP

Becoming a Changemaker  
Technology Entrepreneurship

### SOCIAL JUSTICE

Economic Development  
Civil Rights and Movements  
Morality and Social Justice  
K-8 Teaching in STEM Classrooms

### PHYSICS

Quantum Information Science  
Quantum Mechanics (I & II)  
Electromagnetism & Optics  
Mathematical Physics  
Optics, Relativity, and QM  
E & M and Thermodynamics  
Newtonian Mechanics

## EXPERIENCE

### FEATHER HEALTH | DATA SCIENCE INTERN

July 2020 - August 2020 | Saratoga, CA

- Performed in-depth exploratory analysis of time series feature detection
- Determined benchmarking protocol and developed associated python package

### AURANSA | DATA SCIENCE INTERN

Jan 2020 - June 2020 | Palo Alto, CA

- Developed statistical analysis pipeline which is now being used for quality assurance analysis and knowledge discovery
- Benchmarked, debugged, and improved performance of core engine

### ASPIRE EDUCATION | ACADEMIC TUTOR

October 2017 - December 2019 | Oakland, CA

- Tutored high school and college students from disadvantaged backgrounds in computer science, math, and physics

### GOODLY LABS | SEMINAR SUPERVISOR

June 2018 - May 2019 | UC Berkeley

- Researched and learned new methodologies in machine learning then developed and conducted seminars, teaching the skills to different teams

## PROJECTS

### FORESTRY POLICY ANALYSIS | LDA LEAD

January 2019 - August 2019 | UC Berkeley

- Built product to analyze forest policy documents for World Resources Institute
- Led development of Topic Modeling aspect (using Latent Dirichlet Allocation)

## PRESENTATIONS & PUBLICATIONS

### SOCIAL IMPACT AT KDD CONFERENCE | POSTER PRESENTER

KDD 2019 | Forestry Policy Analysis

### URANUS EVOLUTION MODELS WITH SIMPLE THERMAL

BOUNDARY LAYERS | COAUTHOR

September 2016 | Icarus Vol. 275 Pages 107 - 116

## RESEARCH

### MAGNETIC THIN FILMS | SMART FELLOW AND RESEARCH ASSISTANT

May 2017 - May 2019 | Lab of Prof. Hellman at UC Berkeley

- Independently investigated magnetic properties of ultra-thin amorphous films
- Developed code library for lab, streamlining data analysis process

### PLANETARY MODELING | RESEARCH ASSISTANT

June 2014 - September 2014 | Lab of Prof. Fortney at UC Santa Cruz

- Developed a more accurate model of the interior of Uranus using C++

## LEADERSHIP

### SCUBA @ BERKELEY | FOUNDER AND PRESIDENT

December 2017 - December 2019 | UC Berkeley

- Built club from the ground up and grew membership to over 50
- Organized regular meetings, social events, certifications, and dive trips

### COMPETITIVE SOCCER | TEAM CAPTAIN

2011 - Present | Sunnyvale Alliance Soccer Club & UC Berkeley

\* signifies a MOOC