

# ABHISHEK SHARMA

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## EDUCATION

### University of California, Berkeley

B.S. Electrical Engineering & Computer Science, Certificate of Entrepreneurship & Technology

August 2017 - May 2021

Berkeley, CA

**Relevant Coursework** *Algorithms — Artificial Intelligence — Data Structures — Data Science — Databases — Deep Reinforcement Learning — Deep Neural Networks — Discrete Math & Probability Theory — Linear Algebra — Machine Learning — Machine Structures — Marketing for Technologists — Multivariable Calculus — Operating Systems — Product Management — Tech Firm Leadership*

## PROFESSIONAL EXPERIENCE

### Salesforce

*Incoming Associate Product Manager Intern*

May 2020 - August 2020

San Francisco, CA

- One of twelve APM interns for summer 2020. Working on Autonomous AI for Einstein Discovery team.

### Amazon

*Software Development Engineer Intern*

May 2019 - August 2019

Seattle, WA

- Implemented a Remote Procedure Call (RPC) service in Java to search and deliver indexed healthcare data for Amazon Pharmacy.

### Google

*Machine Learning & Data Analytics Fellow*

January 2019 - April 2019

Mountain View, CA

- Derived novel 'explosiveness' metric for ranking teams for Google Cloud's NCAA March Madness Analytics Campaign. (Python, SQL)
- Architected custom Deep Neural Network regression design to predict statistics in college basketball tournament games with 71% accuracy.
- Appeared in 2 documentaries and 2 television commercials with live predictions at half-time of Championship Game. ([g.co/marchmadness](https://g.co/marchmadness))

### Oracle

*Data Analytics Intern*

July 2018 - November 2018

San Francisco, CA

- Optimized accuracy of solar energy output predictions for ~16 million customers by validating deep neural-network based approach.
- Owned and oversaw production of a large-scale machine learning feature for high-profile utilities customers such as PG&E.
- Reduced energy estimation error and runtime by 80% by migrating feature implementation from online service API to deep learning models.

### International Computer Science Institute

*Data Scientist Intern*

May 2018 - August 2018

Berkeley, CA

- Contributed to improving AudioSet sound recognition deep learning project by building AudioNet, a fully annotated audio/video dataset.
- Developed shell scripts in Bash and hearing-screen tool (in Javascript and Python) to automate data cleaning and hire project members.
- Automated audio/video data annotation process by building annotation pipeline software and maintaining dev tools on linux AWS server.

## ACTIVITIES & LEADERSHIP

### Intel

*Artificial Intelligence Student Ambassador*

February 2019 - Present

Berkeley, CA

- Selected for graduate-level fellowship; conducting independent publication-track Machine Learning research with Intel computing resources.
- Investigated a new method of learning to rank for information retrieval by applying a deep reinforcement learning approach.
- Implemented Deep Q-Network using Pytorch and achieved state-of-the-art accuracy on Microsoft's LETOR dataset.

### UC Berkeley Division of Data Sciences

*Open-Source Developer*

September 2019 - Present

Berkeley, CA

- Contributed to otter-grader, a local Python notebook autograding library to be used by University Data Science programs worldwide.
- Currently building server-side functionality for Python auto-grader and a data collection server for analyzing edX course pain points.

### Convergent UC Berkeley

*Co-Founder, Director of Engineering — [www.calconvergent.com](https://www.calconvergent.com)*

September 2018 - Present

Berkeley, CA

- Wrote an unsupervised learning algorithm (k-means clustering) to automate creation of diverse teams within product development club.
- Built and currently maintain club website using Node.js, HTML, CSS, and AWS.

### Innovate Berkeley (Incubator Program)

*Tech Lead — CalSpot*

September 2017 - October 2017

Berkeley, CA

- Defined concept and requirements for a software product that would reduce overcrowding at popular UC Berkeley campus locations.
- Designed neural network regression model for online learning which can forecast crowdedness at dining halls and libraries.

## PROJECTS

### Attendy

*Facial Recognition for Class Attendance*

Jan 2020 - Mar 2020

Berkeley, CA

- Built a handheld device that can scan and identify present/absent students in class by taking and analyzing pictures in real-time.
- Trained a Convolutional Neural Network for facial recognition (Keras) and deployed on a Raspberry Pi. Wrote shell scripts for automation.

### Stocksify - AI Stock Advisor

*Machine Learning for Stock Prediction*

May 2018 - Aug 2018

Fremont, CA

- Implemented an ensemble of machine learning models for stock prediction in Python, in the form of a lightweight web application.
- Current models in use: Kernelized Regression, LSTM Neural Network for time series analysis / Logistic Regression for interpreting news.

## AWARDS & HONORS

**Academic Awards** National Merit Scholar, PTSA Scholarship Winner, 1st Place at DECA Marketing Case Study State Competition.

**Community Awards** Eagle Scout, President's Gold Volunteer Service Award (awarded thrice for 1000+ service hours across 3 years).