

# Devanshu Desai

Ranked #1 Python Programmer on HackerRank



(408) 230 - 7887 | dbdesai@ucsd.edu

## EDUCATION

### UNIVERSITY OF CALIFORNIA

#### BACHELOR OF SCIENCE IN DATA SCIENCE

June 2021 | San Diego, CA

Magna Cum Laude

Cum. GPA: 3.87 / 4.0

Major GPA: 3.96 / 4.0

## SKILLS

Expert

Java • Shell • Python • Javascript •  $\LaTeX$

Proficient

C++ • React •

Intermediate

iOS • Android • MySQL

## COURSEWORK

### GRADUATE

Recommender Systems

Advanced Deep Learning

Computational Evolutionary Biology

Probabilistic Graphical Models

### UNDERGRADUATE

Computer Vision

Scalable Systems For Data Analytics

IoT Systems For Data Analytics

(Quarter-long project)

Theoretical Foundations of Data Science

(Teaching Assistant x7)

Data Structures And Algorithms

(Teaching Assistant x1)

## ACHIEVEMENTS

### COMPETITIVE ML

Winner - Semi-Supervised MNIST

(Kaggle)

1st Runner up - UCSD Datathon 2020

### COMPETITIVE PROGRAMMING

Rank 1 - HackerRank Python Challenge

### SCHOLARSHIPS

Undergraduate Research Scholar -

Halicoglu Data Science Institute

Provost Honors - UCSD

Magna Cum Laude - UCSD

## PUBLICATIONS

Dive Into Data Science

## EXPERIENCE

### NANOME INC. MACHINE LEARNING INTERN

Jan 2020 - Present | San Diego, CA

- *Developed* a novel deep-learning-based approach to address the company's voice recognition needs.
- *Pioneered* an alpha build for the company platform's 1<sup>st</sup> attempt at a voice command assistant for the platform.
- *Reduced* server latency for voice responses by 75% compared to on-device recognition for Oculus devices.
- *Improved* command hit rate by 12% using an implementation of **LSTM-based DeepSpeech** and **BERT embeddings**.

### METRIM DATA DATA SCIENTIST

Nov 2017 - Oct 2019 | San Diego, CA

- *Devised* a novel method using **Recurrent Neural Networks** and **Variational Autoencoders** for target prediction.
- *Optimized* our inference models to run on **Google Cloud TPUs** instead of multiple GPUs
- *Observed* a 4x improvement in inference times and a 3x speedup in training times as a result of the aforementioned optimizations.
- Engineered end-to-end data ingestion and **ETL pipeline** to run on 10 TB of data from the Common Crawl dataset.
- Extracted features for lead prediction were stored in a MySQL database to be queried with a **REST API** by our front-end.

### UC SAN DIEGO INSTRUCTIONAL ASSISTANT

Sept 2018 - Present | San Diego, CA

- *Automated* style checks for DSC 20 which directly resulted in over 500+ tutor hours saved in the last 2 years as well as saving the Data Science department over **USD \$10,000** in tutor compensation.
- *Implemented* a linear regression-based runtime check-in DSC 40B which has so far resulted in 20+ hours of manual grading saved for the tutors along with direct cost savings for the department.
- *Created* several homework and exam solutions to administer the coursework effectively and uphold the value of a UCSD degree.

## RESEARCH

### MCAULEY LAB UNDERGRADUATE RESEARCH SCHOLAR

Dec 2020 - Present | San Diego, CA

- *Optimized* Recommender Systems to using Facebook AI Research's state of the art benchmarking platform.
- *Mentored* under **Julian McAuley**.

### SU LAB | RESEARCH ASSISTANT

Jan 2020 - April 2020 | San Diego, CA

- *Collaborated* with post-doctoral researchers in **Hao Su**.
- *Customized* **Facebook AI Research's VoteNet** model to work on a custom dataset.
- *Augmented* the **PartNet** dataset to perform better with our model resulting in a 1.5% improvement in classification accuracy.