# Parth Doshi

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### **EDUCATION**

### University of California San Diego

San Diego, CA

M.S. in Computer Science & Engineering

Sep 2021 – Jun 2023 (Expected)

**University of Mumbai** 

Mumbai, IN

B.E. in Computer Engineering, GPA: 9.9/10

Aug 2016 – Sep 2020

- Relevant Courses: Algorithms, Machine Learning, Artificial Intelligence, Software Engineering
- Rank: 1<sup>st</sup> in the department of 150 students

### **TECHNICAL SKILLS**

Languages & Databases: Python, C, Java, HTML5, SQL, JavaScript, MySQL, SQLite, MongoDB

Frameworks & Libraries: TensorFlow, Keras, PyTorch, TensorRT, OpenCV, Scikit-Learn, NumPy, Django

**Software Tools**: Git, Atom, Google Cloud Platform

### PROFESSIONAL EXPERIENCE

Clutterbot Inc.

Wellington, NZ

Machine Learning Engineering Intern (Remote)

Nov 2020 – Jun 2021

- Worked towards creating a household robot for room organization
- Benchmarked Multiple Object Tracking methods on the Google Coral USB Accelerator using TensorFlow-Lite
- Made use of TensorRT to improve inference speeds on the Nvidia Jetson platform

### Desynova Digital Pvt. Ltd.

Mumbai, IN

Machine Learning Engineering Intern

Jun 2019 - Oct 2019

- Implemented pipelines for various video processing tasks leveraging Python and Google Cloud Platform
- Improved video search by extracting textual metadata from movie credits with optical character recognition
- Minimized manual effort and improved video processing speed by 2X through automated subtitling

Software Development Intern

Jun 2018 - Aug 2018

Optimized the Django/MongoDB back-end for a major customer-facing software tool at Desynova

#### RESEARCH EXPERIENCE

### Image Modification using Text with Generative Adversarial Networks (GANs)

Aug 2019 - May 2020

- Published a novel method to change image features such as object color and shape using natural language
- Leveraged PyTorch to train a GAN model on the DeepFashion dataset to demonstrate virtual trial of clothes

### PROJECTS & OPEN-SOURCE CONTRIBUTIONS

## Google BIG-Bench

May 2021 – Jul 2021

- Contributed to the Crash Blossoms task (code)
- Established a baseline for how large language models perform when faced with ambiguous news titles
- Created task questions and analysed the results of GPT-2 models

### Sign Language Recognition using Sensor Data

Jan 2019 - Apr 2019

- Utilized the Australian Sign Language dataset consisting of data streams collected using electronic gloves
- Achieved 94 % classification accuracy with Support Vector Machines implemented using Scikit-Learn
- Built artificial neural networks and Long Short-Term Memory models for temporal classification using Keras

## **Book Recommendation System**

Sep 2018 - Oct 2018

- Implemented a Django web-app with the Recombee API to suggest books based on user preferences
- Integrated the Google Books API for easy search and reading capabilities

### **ACTIVITIES & INTERESTS**

- Participant at the Summer School on Computer Vision, IIIT Hyderabad: Attended multiple talks and seminars on computer vision tasks and interpretability of neural networks over a period of one week
- **DJ Unicode**: Mentored 10 students over a course of 2 years in open-source software development