Shantanu **Deshmukh**

RESEARCH ASSISTANT · GRADUATE STUDENT · SAN JOSE STATE UNIVERSITY

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Sk**ills**

Java, Python, Tensorflow, Flask, MongoDB, Node js, Express js, Angular, D3.js, Android Development, JSP, JavaScript, PHP, jQuery, MySQL, LAMP, MySQL, Spring Framework, Web Development, HTML, CSS, Linux

Wor**k Experience**

AcuityAI Stanford Startup
COMPUTER VISION AND MACHINE LEARNING INTERN

Palo Alto, CA
June 2018 - PRESENT

- Using Deep Metric Learning(Tensorflow) for brand object detection and exposing it via REST-ful Flask API;
- Training and Validating on different self-scrapped curated datasets;
- Using Google Cloud virtual instance, AWS S3 bucket, AWS Dynamo db, AWS CodeStar and other cloud services;

San Jose State University
RESEARCH ASSISTANT

San Jose, CA
Jan. 2018 - PRESENT

- Classification of Inhibitors of Hepatic Drug Transporters using deep learning;
- Working on image processing using openCV and AI algorithms to create visually appealing pictogram of the side effects of medicines & drugs;
- Using Mongo DB, Express js, Node js & Angular (MEAN) Stack to create an interactive portal, hosted on Google Cloud Platform's virtual instance;
- Awarded funds by the SJSU College of Science Research, Scholarship, and Creative Activity (RSCA) grant;

Deloitte Consulting LLP
BUSINESS TECHNOLOGY ANALYST (DELOITTE DIGITAL)

Mumbai, India
Nov. 2015 – Aug. 2017

- Coded business use cases in Java for a B2C website, creating REST-ful web services and helped integrating them with the angular front-end;
- Handled multiple project-critical complex modules, ensuring timely delivery, working under an Agile development model;
- Created a distributed data processing engine using Apache Storm and Apache Kafka, as a Firm initiative to be proposed to a prospective client;

Accenture Services Pvt. Ltd
SOFTWARE ENGINEER

Hyderabad, India
Aug. 2013 – Oct. 2015

- Designed and Developed REST-ful API's fetching data from a SOAP based service for a B2B website in Java along with their jUnit test cases ;
- As an initiative, created a XML based automated testing framework to test REST services, saving around 40% of the testing effort;
- Was awarded ACE(Accenture Celebrates Excellence) award for effective team-work and successfully delivering a high risk project;

City Synapse Info Pvt. Ltd. (Internship)
WEB DEVELOPER INTERN

Bangalore, India
Jan. 2012 - July. 2012

- Maintained the website realtykart.com; adding/editing webpages using full stack(LAMP), managing domains and hosting.
- Used google apps, AdWords, Designed and edited digital banners/images using Photoshop, gimp, etc.

Aca**demic Projects**

Obstacle Detection to help Visually Impaired (GuideApp - Android Application)
ANDROID SDK, TENSORFLOW LITE, PYTHON

San Jose, CA
Dec. 2017

- Created an application to alert visually impaired by detecting obstacles on the street
- Trained MobileNet model with self curated images to get an accuracy of 93%

Automated Solar Panel installation layout generation using Object + Edge detection
TENSORFLOW (MOBILENET), PYTHON, EDGE DETECTION ALGORITHM

San Jose, CA
Feb. 2018

- Detected obstacles on roof, followed by edge detection on each of the detected bounding boxes, to get the obstacle boundaries
- Compared and contrasted results from different algorithms

Text Scrapper and Classifier
PYTHON, KNN ALGORITHM, K-MEANS ALGORITHM, TF-IDF

San Jose, CA
Sept. 2017

- Built a web scrapper to scrap jobs from a few job listing websites.
- Used tf-idf vectorization and k-NN algorithm to find the top matched jobs for a search query and grouped them using Lloyd's algorithm.

Visualization using Data Sonification and NLP for e-book comprehension using NLTK
PYTHON, NLTK, JYTHON, GENETIC ALGORITHM, BOOTSTRAP

San Jose, CA
Sept. 2017

- Used Jython music to sonify changes in California's temperature over last 80 years.
- POS tagged web scrapped e-books, extracted and visualized relationships between entities(characters and locations).
- Used genetic algorithm to auto-create a bootstrap based website using characters, locations and events from the book.

Image Classification, Clustering and Mutation
San Jose, CA

Python, K-Means Clustering, Hierarchal Clustering, Genetic Algorithm — *Sept. 2017*

- Classified and Clustered images using k-NN, K-Means and single link hierarchal clustering algorithm
- Performed three fold cross-validation, analyzed and plotted accuracy vs K graph
- Used genetic algorithm to mutate a source image into a destination image.

Data Visualization Web Apps
San Jose, CA

Mongo DB, Express js, Angular js, Node js, D3.js — *Nov. 2017*

- Visualized around 5GB of publicly available Obama government's social media data including images, videos and audios on a chronological time-line based interface
- Visualized California's college's admission data as a force directed graphs, for all academic year's from the year 2003 to 2016.

Rover on Martian terrain
San Jose, CA

C++, OpenFrameworks — *Nov. 2017*

- Built an application where on mars terrain a rover(image) can be dragged from the outside and interacted with.
- Various operations can be performed on the rover, like selection, navigation, manipulation, drag and drop, teleportation, etc.

Proximity Notifier - An Android Application and a Web portal
Mumbai, IN

Android SDK, Linux, Tomcat, PHP, MySQL — *Nov. 2012 – April 2013*

- Created an Android Application and a web portal for proximity based notifications.
- Built using LAMP Stack and Google's Geolocation API.

Extracurricular Activity

Entrepreneurship Cell Website
Mumbai, India

Linux, Apache Tomcat, MySQL, PHP — *March. 2012*

- Worked as a Web Manager of Entrepreneurship Cell, an association managed by students to promote entrepreneurial thinking.
- Created their web portal and developed an on-line treasure hunt for their annual event using LAMP stack.

YouTube Channel tutoring Android Application Development
Mumbai, India

Co-Author — *Mar. 2012*

- Started a you-tube channel tutoring android application development, it has around 18k views.

Education

San Jose State University
San Jose, CA

M.S. in Computer Science **(GPA 4.0)** — *Aug. 2017 - Exp. May. 2019*

KJ Somaiya Institute of Engineering and Information Technology
Mumbai, India

B.S. in Computer Engineering — *July. 2009 - May. 2013*

Program Committees

| 2012 | **Web Manager**, Entrepreneurship Cell | *Mumbai, India* |
| 2011 | **Event Organizer**, Computer Society of India | *Mumbai, India* |

Honors & Awards

Work

2017	**SAP Certified Development Professional**, SAP Hybris Commerce 6.0	*Mumbai, India*
2016	**Applause Award**, For Diligent work and Resourcefulness	*Mumbai, India*
2014	**ACE Award**, For good communication and effective team work to successfully delivery a high risk project	*Hyderabad, India*

Education

2018	**Outstanding Academic Achievement Scholarship**, San Jose State University.	*San Jose, CA*
2011	**Finalist**, National Level Technical Paper Presentation, RAIT, Mumbai.	*Mumbai, India*
2011	**Finalist**, Project Presentation Competition, Fc.RIT, Mumbai	*Mumbai, India*