

# Manas Bunde

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## EDUCATION

<https://www.linkedin.com/in/manasbunde>

**UNIVERSITY OF TEXAS AT DALLAS** | MS in Computer Science

Expected May 2020

Thesis: Image Caption Generation (ongoing)

Advisor: Dr. Jessica Ouyang

**INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR** | B.Tech. in Computer Science & Engineering

May 2016

## SKILLS

Proficient: C • C++ • Ruby on Rails • Python • PostgreSQL

Familiar: Scala • Javascript • Matlab • SQL •  $\text{\LaTeX}$  • HTML • CSS

Tools & Utilities: Tensorflow • Big Data ecosystems (Hadoop, MapReduce, Spark, Kafka, NoSQL systems) • AWS • Git

## WORK EXPERIENCE

**UT DALLAS COMPUTER SCIENCE DEPARTMENT** | CS Grader [Part-time]

Aug 2018 - May 2019

- Graded the tests, quizzes and assignments of a batch of 75 undergraduate students for the course Discrete Mathematics
- Got nominated for the 'Best Grader' Award in the department

**VOYLLA FASHIONS PVT. LTD., JAIPUR** | Software Engineer

May 2016 - Jun 2017

- Project LP Boost: Designed and implemented an algorithm that increased revenue of the company many fold and was probably the first such advanced implementation in the company
- Project Solidus: Voylla Website Upgradation (Team of Eight developers) and Data Migration.
  - Key member of the team of four, involved in developing website's order pipeline.
  - Handled data migration, a very critical aspect of the project which could only be totally tested in production environment

## PROJECTS

**FAKE OPINION DETECTION** | Dr. Anurag Nagar

July 2019

- Developed a supervised learning model using Pyspark and MLlib that was able to detect fake reviews in YelpNYC dataset
- Consisted of various pre-processing and feature engineering techniques, solved the class imbalance problem

**CONVOLUTIONAL NEURAL NETWORK DESIGN FOR MODIFIED MNIST** | Dr. Haim Schweitzer

April 2019

- Implemented a residual network using Tensorflow in Python and included batch normalization, non-linearities, dropout, l2 regularization to improve accuracy and reduce overfitting
- Achieved over 90% accuracy in 4 & 1/2 min on testing data of 10k images with modified different random training datasets of 6k images of size 7\*7

**INTERACTIVE MEDICAL IMAGE SEGMENTATION & 3D VISUALISATION** | B.Tech project

Jul 2015 - May 2016

| Guide: Dr. Chiranjoy Chattopadhyay & Dr. Gaurav Harit

- Developed a semi-automated segmentation technique for efficient image analysis for 3D visualisation as well as image guided surgery at reduced costs and minimized expert intervention
- Got nominated for the Best B.Tech. Project Award, one of the 3 projects nominated in the entire batch of 2016

## PUBLICATION

- Pratik Kalshetti, Manas Bunde, Parag Rahangdale, Dinesh Jangra, Chiranjoy Chattopadhyay, Gaurav Harit and Abhay Elhence; "An Interactive Medical Image Segmentation Framework Using Iterative Refinement", Computers in Biology and Medicine, February 2017, pp. 22-33.

## SELECT POSITIONS OF RESPONSIBILITY

**ASSISTANT CO-ORDINATOR, COUNSELING SERVICE** | IIT Jodhpur

Mar 2014 - Apr 2015

**HEAD, PUBLICITY AND MEDIA, VARCHAS'14** | IIT Jodhpur

Sep 2013 - Feb 2014

## RECENT ACADEMIC ACHIEVEMENT

- Jonsson School \$1000 Graduate Study Scholarship Recipient (2018-19)
- Journal Publication honored with "Meritorious" status in Honored papers 2017, Computers in Biology and Medicine (2018), doi: 10.1016/j.combiomed.2018.05.020