

Anup Anand Deshmukh

IIT-B, Bangalore

+91 8105862592

Deshmukh.Anand@iitb.org

[LinkedIn profile](#)

[Web address](#)

EDUCATION

International Institute of Information Technology, Bangalore.

May 2019

Degree

Integrated Masters in Information Technology

CGPA

3.27/4 (At the end of eighth semester)

Coursework

Reinforcement Learning, Advanced Machine Perception, Machine Learning, Automata Theory and Computability, Big Data Algorithms, Advanced Cryptography, Linear Algebra, Signal Processing, Data Structures - Algorithms

INTERESTS

Recommender Systems and Deep learning in Computer Vision

RESEARCH EXPERIENCE

A Serendipitous Clustering Algorithm For Improving User Satisfaction in Recommender Systems Jan 2018-April 2018

Under review as a conference paper at SAREC 2018

Guide: Prof. Shrisha Rao

- Designed an approach that efficiently tackles the problem of high sparsity and overspecialization in collaborative filtering.
- Effectuated serendipity in movie recommender systems with an end-to-end algorithm, Serendipitous Clustering for Collaborative Filtering (SC-CF) that considers diversity, unexpectedness and relevance.

Fast and Provable Concept Decompositions in Large Text Corpus

Sept 2017-April 2018

Under review as a conference paper at ACML 2018

Guide: Dr. R. Pratap

- Experimentally validated the SPKM++ algorithm by considering the spherical clustering problem for large sparse document collections.
- Proved that using Markov Chain Monte Carlo (MCMC) seeding technique, the computational complexity in SPKM++ can be decreased while retaining the clustering results.

WORK EXPERIENCE

Perception of emotions from Audio Signals

Ongoing

Intern at FAST lab-CentraleSupélec, Rennes-France

Guide: Prof. Renaud Segquier

- Working on Audio-Video modalities for finding the subtle changes in human face to model stress in real time.

CNN based Spatio-Temporal Features of Crowd Models

May 2017-July 2017

Intern at Murdoch University, Perth-Australia

Guide: Prof. Ferdous Sohel

- Worked on a problem of crowd counting which used conditional GAN proposed by Philip Isola, UC Berkeley and was extended to crowd dataset like SHOCK and WIDER FACE.
- Qualitatively analyzed the CNN based models which effectively learn spatial features together with appearance features for video analysis.

SlicePAY (formerly Buddy), Bangalore, India

May 2016-July 2016

Full Stack Developer

- Led the task of bringing flexibility in payment through India's top 10 merchant websites.
- Built the browser extension using JavaScript which gave access to the SlicePAY's payment plans right from user's merchant website. Link: [SlicePAY's chrome extension](#)

COURSE PROJECTS

Merge LSTM model for Image Description Generation

August 2017-April 2018

Research Elective, IITB-India

Guide: Prof. Dinesh Babu

- Analyzed and built the retrieval based model using Keras and Tensorflow on the construction which uses both LSTM's for language modelling and CNN's for generating image representation.

Automated Essay Scoring with Cross Feature Vector Generation

August 2017-Dec 2017

Course: Machine Learning I

Guide: Prof. G Srinivasa R.

- Designed and implemented the Intelligent Text Rater(ITR) with the proposed novel approach of feature vector generation of text essays which significantly reduces the required training data size.

Automatic Verification of Program Correctness

Jan 2017-May 2017

Course: Programming Languages

Guide: Prof. Manish Gupta

- Studied the Ullman's algorithm and Backtracking procedures used in converting one program dependence graph (PDG) to another in order to find the distances in submitted codes through Sketch tool.

SKILLS	<div> <div> <i>Languages</i> <i>Tools</i> </div> <div> Python(Keras, Tensorflow), C++, JScript Matlab, Latex </div> </div>
ACADEMIC ACHIEVEMENTS	2016 Winner of the Hackathon held in IIIT-B as part of the Signal Processing course. 2016 Designed and created an Intellectual Property Management Portal for IIIT-B which secured place in top 3 from 17 teams. 2014 Top 1% in Maharashtra State's Higher Secondary School Certificate (HSC) exam. 2012 Secured All India Rank 940 in International English Olympiad. 2011 Secured All India Rank 2380 in 10 th National Cyber Olympiad.
LEADERSHIP	2018 Teaching Assistant , for the course Theory of Automata and Computations at IIITB 2017 Curator , TEDx IIITB 2015 Editorial Board , IIITB's '8 bit' magazine 2014 Co-Founder , IIITB 'Comic Club' 2014 Social Media Team , Microsoft TechEd 2014