# ADITYA ANANTHARAMAN

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#### **EDUCATION**

National Institute of Technology Karnataka, Surathkal

Bachelor of Technology Information Technology

GPA: 9.47/10 (6 sems), Class Rank: 6/101

Surathkal, India
August 2015 - May 2019

Senior Secondary School

Class 12, CBSE AISSCE Secured 96 percentage and 99.38 percentile

June 2013 - March 2015

**Secondary School**Class 10, CBSE AISSE Scored a perfect 10/10 CGPA

Hyderabad, India

June 2012 - March 2013

RESEARCH EXPERIENCE

# Indian Institute of Technology, Hyderabad (IITH)

Hyderabad, India

Bangalore, India

Research Intern at Visual Learning and Intelligence (VIGIL) lab.

August 2018 | December 2018

 $Advisor:\ Dr.\ \ Vineeth\ N\ Balasubramanian$ 

- Developed a novel Multi-Space model for Zero-Shot Object Detection (ZSOD).
- Multi-Space model leverages both semantic and visual spaces to alleviate the hubness problem.
- Model outperforms the previous best in ZSOD on the Pascal VOC dataset.

# Institute of Systems Studies and Analysis, DRDO Summer Research Intern

New Delhi, India May 2017 | July 2017

- Worked on Frequent Itemset Mining using Eclat algorithm for large datasets.
- Extended the Eclat algorithm and developed FT-Eclat for Fault-Tolerant Frequent Itemset Mining.

#### WORK EXPERIENCE

### Microsoft, R&D

Hyderabad, India

Software Engineering Intern

May 2018 | July 2018

- Worked in the Microsoft Azure Networking team and developed a Test Cluster management service.
- Built a UI dashboard for real-time interacting and reporting alongside the service.

#### **Publications**

- Mandikal Vikram, Aditya Anantharaman, Suhas B S and Sowmya Kamath, "An Approach for Multimodal Medical Image Retrieval using Latent Dirichlet Allocation", India KDD CoDS-COMAD 2019 (Oral Presentation). Short version accepted at AI for Social Good Workshop, NIPS 2018.
- Mandikal Vikram, **Aditya Anantharaman**, Suhas B S, Ashwin TS, Ram Mohana Reddy, "Kinect Based Suspicious Posture Recognition for Real-Time Home Security Applications", IEEE Indicon 18.

### SELECTED PROJECTS

# Paraphrase Detection using Deep Learning Tensorflow, Python, NLTK

[Github]

Applied paraphrase detection to the medical domain of clinical notes. Developed a Bidirectional RNN based model with multi-perspective matching and Attention mechanism.

#### Parallel k-means Clustering OpenMP, MPI, CUDA, C++

[Github]

Used k-means clustering for Image Colour Quantization and Image Compression. Implemented on 3 platforms - OpenMP, CUDA and MPI with a speed up of order  $10^3$  in CUDA due to data parallelism.

# Android Malware Detection Tensorflow, Python

Github

Classification of android apps done based on pseudo-dynamic analysis of system API Call sequences. Developed a Deep Autoencoder model for feature compression along with CNN and RNN based models.

## Programming Skills

Languages and Scripts: C++, C, Python, Java, C#, Erlang, HTML, CSS, Javascript, MySQL

Deep Learning Frameworks: TensorFlow, PyTorch

Tools: Android Studio, OpenGL, Django, Git

#### ACHIEVEMENTS AND EXTRA CURRICULARS

Microsoft code.fun.do hackathon Secured 2nd position in online round held at NITK Surathkal.

Lawn Tennis Winner at All India Inter-NIT Tennis Tournament 2017-18 and Runners up in 2016-17

Executive Member Computer Society IEEE-NITK Student Branch, Web Enthusiasts' Club NITK