

ADITYA ANANTHARAMAN

adityaan@andrew.cmu.edu • (412) 636-6221 • <https://aditya5558.github.io> • www.linkedin.com/in/aditya1997

EDUCATION

Carnegie Mellon University (CMU), School of Computer Science Pittsburgh, PA
Master of Computational Data Science (MCDS) | GPA: 4.08/4.33 December 2020
Relevant Coursework: Machine Learning, Cloud Computing, Deep Learning, Neural Networks for NLP, Machine Learning for Large Datasets, Computer Systems, Interactive Data Science

National Institute of Technology Karnataka, Surathkal (NITK) Surathkal, India
Bachelor of Technology Information Technology | GPA: 9.54/10, Class Rank: 5/103 May 2019
Relevant Coursework: Linear Algebra and Matrices, Soft Computing, Design and Analysis of Algorithms, Computer Vision, Information Retrieval, Advanced Computer Networks, Time Series Analysis

EXPERIENCE

Amazon Seattle, WA
Applied Scientist Intern, Amazon Search May 2020 - Aug 2020

- Working on using deep learning models to link context-of-use entities with products to improve search experience.

Indian Institute of Technology, Hyderabad (IITH) Hyderabad, India
Research Intern at Visual Learning and Intelligence (VIGIL) lab August 2018 - December 2018

- Developed a novel Multi-Space model for Zero-Shot Object Detection (ZSD).
- Leveraged both semantic and visual spaces and introduced a cross-modal consistency loss to alleviate hubness.
- Outperformed the state-of-the-art in ZSD on Pascal VOC by 14% in terms of mAP. Work accepted at WACV 2020.

Microsoft Hyderabad, India
Software Engineering Intern, Azure Networking May 2018 - July 2018

- Developed a plug and play service for effective management, monitoring and usage of Test clusters.
- Facilitated easy locking and unlocking of clusters and devised health checks for seamless maintenance of clusters.

SELECTED PUBLICATIONS

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- D Gupta, **Aditya Anantharaman**, N Mamgain, S Kamath, V Balasubramanian, C V Jawahar “A Multi-Space Approach to Zero-Shot Object Detection”, Winter Conference on Applications of Computer Vision (WACV 2020)
 - 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, NeurIPS 2018.

ACADEMIC PROJECTS

End-to-End 2D to 3D Video Conversion | CMU [Github](#) | Spring 2020

- Implemented Deep-3D, a deep learning model which combines information from multiple levels to estimate depth.
- Extended Deep-3D using monocular depth estimation and segmentation masks from Mask-RCNN.
- Proposed novel early and late fusion techniques and outperformed Deep-3D on Inria-3D movie dataset.

Fact Extraction and Verification (FEVER shared task) | CMU Spring 2020

- Developed an end-to-end model for FEVER to perform document retrieval, sentence selection and claim verification.
- Implemented a BERT-based model and strengthened claim verification module using Multi-Task Deep Neural Networks (MT-DNN) and Stochastic Answer Networks (SAN) in addition to multi-hop evidence reasoning.
- Proposed approach outperforms previously proposed BERT-Large model using BERT-Base in terms of label accuracy.

Semi-Supervised Clustering in Cellular Cryo-Electron Tomography | CMU Spring 2020

- Proposed a Semi-supervised clustering approach with K-means Regularizer (SKR) which improves on unsupervised approaches by using a small amount of labelled data.
- Proposed approach (SKR) outperforms state-of-the-art semi-supervised method in Cryo-Electron Tomography.

SKILLS

Languages and Scripts:	C++, C, Python, Java, C#, HTML, CSS, Javascript, MySQL
Deep Learning Frameworks:	TensorFlow, PyTorch
Cloud Platforms and Tools:	AWS, Azure, Google Cloud Platform, Hadoop MapReduce, Spark