# Aashutosh A V

+1(972)918-1130 | avaashutosh04@gmail.com | linkedin.com/in/aashutosh-av | Atlanta, GA

## **EDUCATION**

## Georgia Institute of Technology

MS in Computer Science (Specialization: Machine Learning)

Aug. 2025 - May. 2027

## Birla Institute of Technology & Science, Pilani

B.E Computer Science (Minor in Data Science) GPA: 9.08 / 10

Oct. 2021 - Jun. 2025

# Internships

Microsoft Research

Jan. 2025 – July. 2025

Research Intern

Bangalore, India

- Co-authored a paper (Under Review at VLDB, 2026) on optimizing NoSQL Workloads for CosmosDB
- Filed a patent titled A Scalable Quality of Service centric Database Packing Policy System
- Built a system to compile forecasting models into native CosmosDB queries for on-server execution

Yashoda Hospitals May. 2023 – Jul. 2023

Machine Learning Intern

Hyderabad, India

- Developed RNN-based models for live prediction of body-vital values
- Built pre-processing pipelines to handle noisy time-series ICU Data

## RESEARCH EXPERIENCE

#### ActionGenome - ScenarioCLIP

 $Jul.\ 2024-Mar.\ 2025$ 

DFKI Germany; BITS Pilani, Hyderabad

- Constructed a dataset extending ActionGenome with scenario-level annotations using VLMs
- Designed a modified CLIP model using contrastive learning for generating scene-understanding embeddings
- Work done as a part of my Undergraduate Thesis
- · Currently under review at WACV, 2026

## Narrating For You

Jul. 2024 - Mar. 2025

BITS Pilani, Hyderabad

- Developed a joint learning methodology for audio-video-text inputs for Deepfake Video generation
- Winning Demo at the RAISE Workshop, 2024, a workshop for AI and Robotics
- Published Paper at WACV, 2026

### Latent Flow Diffusion for Deepfake Video Generation

Feb. 2024 – Apr. 2024

University of North Carolina, Charlotte; BITS Pilani Hyderabad

- Incorporated Vision Transformers to Flow Diffusion Techniques for frame-by-frame understanding of the driving image
- Published Paper at the CVPRW, 2024

# GLoCo (Global-Local Contextualisation for Community Detection)

Feb. 2025 – Present

BITS Pilani Hyderabad

- Designed a GNN Framework that fuses global and local contexts of unweighted graphs for Community Detection
- Implemented a dual view attention mechanism that is beating state-of-the-art baselines in NMI & Modularity scores

#### **EEG-Based Emotion Classification**

Jul. 2023 - Nov. 2023

BITS Pilani Hyderabad, Nizam Institute of Medical Sciences

- Contributed to NIMS, one of the largest Medical Institutes in India
- Developed a novel CNN-based architecture to classify emotions based on EEG Signals

## Technical Proficiency

Programming: Competitive Programming (Candidate Master @ Codeforces (Best: 1928))

AI/ML: Deep Learning, Machine Learning, Generative AI, Computer Vision, Natural Language Processing, Graph Learning

Other: Probability, Statistics, Time-Series Analysis, Forecasting Models