

I'm PhD Student at Arizona State University passionate about Complex Reasoning for Data Visualizations and Story Telling Data, advised by [Prof Vivek Gupta | CoRAL](#). My research pivots around complex reasoning, and human-centered design on bridging the gap between raw data and insightful narratives by using Vision-Language Models to design innovative visualizations and infographics towards advancing Vision-Language models.

Experience

- Mar 2024
Aug 2024 **SME for Gen AI and LLMs | [Inferigence Quotient](#)**
Democratizing Efficient and Effective Small Language Models.
- Aug 2023
Aug 2024 **External Collaborator, GIRL | [University of Wyoming](#)**
Collaborating with [Dr. Shivanand VS](#) on 3D Model generation and part manipulation.
- Jul 2022
Aug 2023 **Research Assistant, CEVI | [KLE Technological University](#)**
Under the guidance of Dr. Uma Mudenagudi, I work with my team @ CEVI to build Human-Perception aware Deep Learning Models for 3D Geometry.
- Aug 2022
Dec 2022 **Consultant, Project Vision | [EiNETCORP](#)**
We provide aid to the blind, by providing audio descriptions of images or video content, or by helping to navigate unfamiliar environments through the use of auditory or haptic feedback using AI Models.

Publications

- ORALS**
Feb 2025 **[Mahalanobis k-NN: A Statistical Lens for Robust Point-Cloud Registrations, Image Quality Gen AI | WACVW 2025](#)**
Tejas Anvekar , Shivanand Sheshappanavar
- POSTER**
March 2024 **[A Benchmark Grocery Dataset of Realworld Point Clouds from Single View, main-track | IEEE 3DV 2024](#)**
Shivanand Sheshappanavar, Tejas Anvekar, Shivanand Kundargi, Yufan Wang, Chandra Kambhamettu
- Student Abs**
March 2024 **[Novel Class Discovery for Representation of Real-World Heritage Data as Neural Radiance Fields, Student-Abstract | AAAI-2024](#)**
Shivanand Kundargi, Tejas Anvekar, Ramesh Ashok Tabib, Uma Mudenagudi
- Spotlight**
Oct 2023 **[ASUR3D: Arbitrary Scale Upsampling and Refinement of 3D Point Clouds using Local Occupancy Fields, e-heritage | ICCVW 2023](#)**
Akash Kumbar, Tejas Anvekar, Ramesh Ashok Tabib, Uma Mudenagudi
- Spotlight**
Oct 2023 **[DeFi: Detection and Filling of Holes in Point Clouds Towards Restoration of Digitized Cultural Heritage Models, e-heritage | ICCVW 2023](#)**
Ramesh Ashok Tabib , Dikshit Hegde, Tejas Anvekar, Uma Mudenagudi
- POSTER**
Oct 2023 **[TP-NoDe: Topology-aware Progressive Noising and Denoising of Point Clouds towards Upsampling, WiCV | ICCVW 2023](#)**
Akash Kumbar*, Tejas Anvekar*, Tulasi Amitha Vikrama, Ramesh Ashok Tabib, Uma Mudenagudi
- ORALS**
Jun 2023 **[GPr-Net: Geometric Prototypical Network for Point Cloud Few-Shot Learning, DLGC | CVPRW 2023](#)**
Tejas Anvekar, Dena Bazazian
- PRE-PRINT**
Jun 2023 **[PointCLIMB: An Exemplar-Free Point Cloud Class Incremental Benchmark, CLVision | CVPRW 2023](#)**
Shivanand Kundargi*, Tejas Anvekar*, Ramesh Ashok Tabib, Uma Mudenagudi

POSTER
Jun 2023

IPD-Net: SO(3) Invariant Primitive Decompositional Network for 3D Point Clouds, StruCo3D | CVPRW 2023

Ramesh Ashok Tabib , Niteesh Upasi, **Tejas Anvekar**, Dikshit Hegde, Uma Mudenagudi

CHALLENGE
Jan 2023

ApX, MaCVi | WACVW 2023

Shivanand Kundargi*, **Tejas Anvekar***, Ramesh Ashok Tabib, Chaitra Desai, Uma Mudenagudi

POSTER
Dec 2022

Metric KNN is All You Need, SIGGRAPH ASIA 2022

Tejas Anvekar, Ramesh Ashok Tabib, Dikshit Hegde, Uma Mudenagudi

SPOTLIGHT
Jun 2022

VG-VAE: A Venetus Geometry Point-Cloud Variational Auto-Encoder, DLGC | CVPRW 2022

Tejas Anvekar, Ramesh Ashok Tabib, Dikshit Hegde, Uma Mudenagudi

ORAL
Jun 2022

DA-AE: Disparity-Alleviation Auto-Encoder Towards Categorization of Heritage Images for Aggrandized 3D Reconstruction, IMW | CVPRW 2022

Dikshit Hegde, **Tejas Anvekar**, Ramesh Ashok Tabib, Uma Mudenagudi

Education

Jan 2025*

PhD in Computer Science | Arizona State University

Aug 2018
Jun 2022

Bachelor of Engineering (B. E.) @ School of **Electronics and Communication Engineering** | KLE Technological University

CGPA: 9.17 / 10, Machine Learning, Computer Vision, Deep Learning.

Jun 2016
Mar 2018

Pre-Education University | St. Paul's PU Science College

Physics: 100/100, Maths: 97/100, Chemistry: 95/100.

Internship

Feb 2024
Nov 2023

Research Intern, [VCG](#) | [CYENS](#)

Collaborating with [Dr. Melinos Averkiou](#) and [Dr. Evangelos Kalogerakis](#) on 3D Building Segmentation both for meshes and point clouds, Currently our subgroup transformer is 1st in the [BuildingNet-Mesh Challenge](#). (Skills: SLURM, Pytorch 3D, Pytorch Geometri, DDP)

Jan 2022
Jun 2022

Research Intern, CEVI | [KLE Technological University](#)

Under the guidance of Dr. Uma Mudenagudi and Mr. Ramesh Ashok Tabib, I worked on Self Supervised Representation of Point Clouds. The knowledge I gained, encouraged me to write VG-VAE @ DLGC | CVPR 2022.

Aug 2021
Dec 2021

Junior Data Scientist, Equilibrium | [Vayu-Tech](#)

Under the guidance of [Harsh Holalad](#), I worked on Data Cleaning, Analysis, and Feature extraction to categorize EQ Biomechanics, for Equine Walk / Trot Analysis using Machine Learning.

Projects

[CEVI](#)

Point Idiosyncrasy: A Point Cloud Quality Assessment Tool

I was privileged to work on “Shape Representation, Reconstruction, and Rendering of 3D Models”, a Research Promotion Scheme supported by the All India Council for Technical Education (AICTE). Towards shape representation of the point cloud, [Metric-KNN](#) and [VG-VAE](#) were used to build a no-reference quality metric and a tool to visualize point-cloud features and quality.

[CEVI](#)

Curation of Crowd Sourced Data for 3D Reconstruction towards Heritage Preservation

During my undergraduate program, I worked under the guidance of Dr. Uma Mudenagudi, where I contributed to the pipeline for crowd-sourcing images of Indian Heritage Sites to extract 3D Point Clouds using photogrammetry. The pipeline required Curation, and Categorize of Data into Unique Clusters of Heritage sites to avoid Topological Noise and Occlusion in the rendered output mesh. I was fortunate enough to contribute to the pipeline with [DA-AE](#) and [LoPo-AE](#) for the unsupervised categorization of images.

SEED

[Image Idiosyncrasy: A Image Quality Assessment Tool](#)

Our team developed a tool to visually monitor the quality of captured images based on no-reference and neural quality metrics to facilitate the process of Data Quality Check and Cleaning @ SEED (Student Engineered Data by Samsung Institute for Research & Development Bengaluru).

SEED

[AnnotateMe: A Semi-automated Image Annotation Tool](#)

We developed a tool for SEED for Image Annotation akin to "labelme". Unlike previous Annotation tools, our tool was able to eliminate the subpixel level annotation and omit the output annotation in JSON / txt along with mask image format.

Achievements

- Jan 2024 **Travel Grant**, Student scholarship and volunteer program | AAAI 24
- Jan 2023 **A.12th Rank**, 1st Workshop on Maritime Computer Vision | WACV 23
- Dec 2016, 2018 **Best Student Award**, St. Pauls Residential School & PU science college
- Jan 2011 **Qualifier**, IAIS Mathematics, UNSW Global

Courses and Certificates

SUMMER SCHOOL

May 2023

[3D Vision Summer School \(3DVSS\)](#), [CVIT](#) | [IIITH](#)

Understanding, interpreting, and implementing 3D processing and 3D vision techniques such as SMPL, Graph Diffusion, NeRF, and Shape Correspondence.

SUMMER SCHOOL

May 2022

[3D Vision Summer School \(3DVSS\)](#), [CVIT](#) | [IIITH](#)

Understanding, interpreting, and implementing 3D processing and 3D vision techniques such as Farthest Point Sampling, K-Nearest Neighbor, PointNet, and Dynamic Graph Convolution Neural Network for Point Clouds.

COURSE

Dec 2021

[Research Experience for Undergraduate \(REU\)](#), [CEVI](#) | KLE Technological University

Course outcomes include the ability to conduct a literature survey, identify research gaps, brainstorm ideas to address those gaps, technical writing, and presentation.

Soft Skills

Python | PyTorch | Docker | Blender3D | Technical Writing | Presentation

Capacity Building

- Jun 2023, 2022, 2021, 2020 **Summer-School on Visual Intelligence**, [CEVI](#) | KLE Technological University
Conducted Hands-on sessions on Interactive Visualization of Machine and Deep-Learning.
- Sep 2020 **Deep Learning using Python (Workshop)**, KLE Technological University
Conducted Hands-on sessions on Advanced Python using OOPs, Numpy, Scikit-learn etc.

References

[Dr. Vivek Gupta](#), [CoRAL](#) | Arizona State University

Director of CoRAL Lab and Assistant Professor School of Computing and Augmented Intelligence

✉ keviv9@gmail.com

[Dr. Uma Mudenagudi](#), [CEVI](#) | KLE Technological University

Dean of Research and Development and Professor School of Electronics and Communication

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[Dr. Dena Bazazian](#), University of Plymouth

Lecturer in Robotics and Machine Vision

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[Dr. Melinos Averkiou](#), [VGC](#) | [CYENS](#)

Associate (Research) Professor @ CYENS Centre of Excellence • Adjunct Research Scientist @ University of Cyprus

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