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🚀 ANNOUNCING: Open 3D Reconstruction Dataset for Spatial Intelligence Research

The next frontier of AI isn't just understanding text or 2D images, it's understanding and generating the 3D physical world. Today, we're happy to share a new resource to advance this field!

📊 Releasing:

✅ 40-50 images from different angles

✅ Optimized for photogrammetry and 3D reconstruction

✅ 100% open source and free to use

🔗 Dataset: https://lnkd.in/d7r8ShFx

🎓 Why This Matters:

Most 3D reconstruction research requires expensive LiDAR scanners or controlled lab environments. This dataset democratizes the field by showing what's possible with just a smartphone camera and the right technique.

Real-world applications:

🏛️ Cultural heritage preservation

🏗️ Architectural modeling

🛍️ E-commerce 3D catalogs

🎮 Gaming asset creation

🤖 Robotics spatial understanding

🛠️ Tech Stack Covered:

✅ Structure from Motion (COLMAP, OpenMVG)

✅ Multi-View Stereo reconstruction

✅ Mesh generation (Poisson, Ball-Pivoting)

✅ Neural methods (NeRF, Gaussian Splatting)

✅ Export to OpenUSD, OBJ, STL, glTF

Want to master 3D reconstruction? Join our mentorship program where we'll:

✅ Build complete photogrammetry pipelines

✅ Explore traditional (COLMAP) AND neural methods (NeRF)

✅ Create production-ready APIs and mobile apps

✅ Submit Kaggle notebooks with state-of-the-art results

✅ Contribute to open-source Spatial Intelligence tools

What You'll Build:

✅ 3D reconstruction pipeline (images → mesh)

✅ MCP server for reconstruction API

✅ Android app for mobile 3D scanning

✅ Baseline implementations and benchmarks

Program Details:

🗓️ Duration: 8-12 weeks

🎯 Level: Intermediate (Python, CV basics required)

👥 Cohort Size: Limited to 2-3 participants

💰 Free. Voluntary, you don't pay us, we don't pay you

GitHub Repository at **https://lnkd.in/dHBeRQJ8**

This is part of Sadrushya (सादृश्य), **Yogesh Haribhau Kulkarni**'s initiative to advance Spatial Intelligence through open collaboration. Inspired by **Fei-Fei Li**'s vision of AI that understands the physical world.

Target Skills:

✅ **OpenCV**, **PyTorch** 3D, **Open3D**

✅ COLMAP, Meshroom

✅ Geometric Deep Learning

✅ Edge deployment (**OpenVino**)

Who Should Join:

✅ Computer Vision experts

✅ Robotics engineers

✅ AR/VR developers

✅ Anyone familiar with 3D + AI

Special thanks to the incredible open-source community: COLMAP team, Open3D contributors, and NVIDIA Omniverse for OpenUSD.

📩 DM or comment below to join the mentorship program! The future of AI is 3D. 🚀! 🌍 ✨ Email at yogeshkulkarni at yahoo dot com cc puneaicommunity dot org with Subject "3D Reconstruction"

#SpatialIntelligence #ComputerVision #3DReconstruction #Photogrammetry #OpenSource #AI #MachineLearning #PuneAICommunity #OpenUSD #NeRF #COLMAP #PyTorch3D #Kaggle #Dataset #3DAI #ComputerVision #OpenSource #Challenge #Mentorship #PuneAI #MachineLearning #Kaggle #BuildInPublic #TechForGood

(Below are pics from the dataset, Yogesh Haribhau Kulkarni's pics taken from different angles)