

## about.

Yashwanth Munukoti is a **Creative technologist** with research specialization and experience in AI based platform development, interactive media, extended reality, and digital production. His work primarily focuses on topics of advanced computational design, allowing him to explore the development of applications leveraging real-time engines, machine vision and AI.

## experience.

### professional.

March'23 - Present

#### design technologist | cove.tool

- Lead product development of vitras.ai, researching and integrating pipelines around LLM/RAG and Computer Vision for the release of a web-based building performance and architecture simulation platform.
- Leading product lifecycle from conception through deployment. Identifying scope of product/feature, prototyping solutions, conducting user testing, product release and further feature integration and maintenance for several products within cove.tool.
- Strategizing intuitive UX allowing for enhanced user flow and interaction with complex simulation tools, achieving improvements in user engagement by 20%.

#### solutions architect | worldbuildr

March'23 - Present

- Developed and implemented end-to-end show control solutions for diverse guest experiences on a digital twins platform.
- Led Unity Development, integrating Unity cloud services with Worldbuildr for enhanced digital twin functionalities.
- Engineered 3D asset optimization pipelines using Pixyz solutions for seamless asset migration and real-time 3D data streaming. Additionally, created add-ons and plugins for BIM platforms and native modeling applications to optimize and prepare 3D assets for cloud transfer.

### personal.

#### [The Fourth Wall VR](#)

Masters thesis as part of The Empathic Machine Assistant project(EMA), engaging in a discourse on empathic intelligence through AI platforms. The product is an autonomous tool for immersive scenography, driven by user speech and responsive to user emotions. Project involved training and integrating several neural networks in the design of a realtime app developed in Unity.

#### [Totems](#)

An AI platform developed as part of The Empathic Machine Assistant project(EMA) research, allowing users to create emotional persona based personalized digital totems. Project involved training and integrating several neural networks in the design of a realtime app developed in Unity.

#### XR Prototyping- Apprenticeship

Apprenticeship in advanced Extended Reality prototyping workflows and spatial computing for several different platforms with a focus on passthrough mixed-reality pipelines.

## education.

### Masters of Science in Architecture Technologies

Southern California Institute of Architecture | Los Angeles, California, United States

### Bachelors of Architecture

Marg Institute of Design and Architecture, Swarnabhoomii | Chennai, Tamil Nadu, India

## skills.

**dev. engine:** Unity, Unreal | **backend:** Python, C#, Javascript | **frontend:** Html/CSS, Javascript, Figma | **version control:** Git, Plastic SCM

**ai & ml.** LLM(RAG Pipelines), Diffusion(ComfyUI, SD Libraries), GAN(CycleGAN, StyleGAN), Tensorflow/PyTorch, Nerf/Gaussian Splats

**3D. model:** Rhinoceros/Grasshopper, Revit, ZBrush, SketchUp, Maya, Blender, Houdini | **render:** Keyshot, V-Ray, Lumion

**2D** Photoshop, Indesign, AfterEffects, PremierPro

## socials.

