

## Profile

Artist and engineer passionate about rendering seeking an opportunity in the gaming industry to contribute to bridging the gap between art and tech in any possible capacity.

## Experience

- Software Engineer 3 years, 4 months  
Sagitec Solutions Pvt. Ltd.
  - Developed, maintained, and migrated 6+ hybrid mobile apps for clients including the American Government
  - Roles included web client front-end and server-side middleware development using Ionic, Angular, NodeJS, ExpressJS
  - Work featured on [Sagitec's website](#)
- Freelance Artist & Composer 1 years, 4 months  
Self Employed
  - Worked on 15+ commissioned projects in music, animation, and more, including a project for a Kollywood film
  - Work screened in the Golden Triangle International Film Festival
- 3D Design Intern 4 months  
CaratLane Pvt. Ltd.
  - Interned in the Product Design Imaging Team to model & render jewelry using Rhinoceros 3D and Matrix plugin

## Notable Achievements

- Co-authored a research paper, [Velocity Skinning](#), a new technique for aesthetic, realtime mesh deformation based on skeletal animation. We published our research at the EuroGraphics'2021 conference.
- Built a custom volumetrics render engine from scratch in C++. Renders using ray marching. Supports emissive volumes and light sources. Implemented acceleration structures such as Axis Aligned Bounding Box (AABB) and Deep Shadow Maps (DSM).
- Collaborated with [Anand Saral](#) to implement a physically based, real time iridescence shader (BRDF) in GLSL using ShaderToy. Also implemented a diffraction BRDF in PBRT for offline rendering.
- Worked under Carol Collins, faculty member of the CU Theater Department, as a Theater Migration Assistant to innovate creative solution and approaches to the virtual classroom during the Fall semester of 2020. Critical roles included adapting existing theater curriculum and transforming to online education while retaining its essence, to combat COVID-19.

## Education

- MS Digital Production Arts 2 years\*  
Clemson University, USA
- Mixing & Mastering for the Electronic Musician 3 months  
Berklee College of Music Online, USA
- BSc Animation 3 years  
Mahatma Gandhi University, Meghalaya, India

## Skills

Maya



Arnold



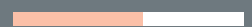
Renderman



PBRT



Nuke



Substance Designer



Substance Painter



C / C++



OpenGL



Python



CUDA



OpenCL



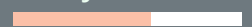
Ionic Framework



Angular



NodeJS



## Hobbies



Photography



Reading



Music