

# Phani Srikar

ENGINE DEVELOPER · GRAPHICS PROGRAMMER

Bangalore, India

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"Pixels....Ummm.... I eat tasty pixels for Breakfast, Lunch and Dinner."

## Skills

<b>Programming Languages</b>	C, C++, Lua, C#, GLSL, HLSL, PSSL2
<b>Consoles</b>	PS5, PSVR 2
<b>Graphics APIs</b>	AGC, OpenGL, Vulkan, DirectX 12
<b>Other APIs</b>	QT
<b>Tools</b>	Visual Studio, RenderDoc, NSight, Blender, Razor, XCode
<b>Game Engines</b>	Unity, Unreal, Phyre Engine, Godot

## Work Experience

### Graphics Programmer

THE FORGE INTERACTIVE, INC.

California, United States (Remote)

June. 2024 - November. 2024

- Worked on The-Forge rendering engine enhancements and internal POC research projects

### Graphics Programmer

SONY INDIA SOFTWARE CENTER

Bangalore, India

Sep. 2021 - June. 2024

- Project - SIE (PS5 SDKQA-Graphics team)
- Researching rendering techniques for PS5
- Developing an internal game engine for PS5 and PC for SARD, Sony India
- Developed a Game Automation Framework for Engine using Imitation Learning
- Ported Sony centre metaverse to PS5 and PSVR2
- Reproduced graphics related papers for R&D teams

### Computer Graphics Engineering Intern

VIGA ENTERTAINMENT TECHNOLOGY

Bangalore, India

Feb. 2021 - Apr. 2021

- Implemented IMU based motion capture pipeline from scratch and development of proprietary motion solving algorithms
- Implemented Research practices in motion capture to production pipeline
- Designed a QT - Vulkan application for visualisation of the 3D motion capture data + plugin for Unreal engine
- Contributed to understanding of IMU sensor data and improvement of sensors workflow

## Projects

### Razix Engine

[https://github.com/](https://github.com/Pikachuxxxx/Razix)

[Pikachuxxxx/Razix](#)

HIGH PERFORMANCE RESEARCH ENGINE FOR PRODUCTION PIPELINE

- Cross-Platform 2D and 3D engine with multi render API support (GL, VK).
- FrameGraph based on EA's frostbite engine and Bindless materials
- Jolt physics engine and lua based scripting
- Global Illumination using Light Propagation Volumes
- Editor and Tools built using QT
- Custom memory, STL and mesh formats for fast mesh loading using job system

## Fireworks Engine

<https://github.com/PikachuXXXX/Fireworks-Engine>

LIGHTWEIGHT SANDBOX GAME ENGINE USING OPENGL FOR ADDITIONAL CUSTOMISATION AND QUICK PROTOTYPING

- Created a complete 2D and 3D rendering pipeline from scratch using OpenGL as the backend API
- Created a simple and clearly documented Engine and Scripting API for faster development and customisation
- Added support for 2D and 3D Audio with an extensive API using OpenAL
- Designed a component system for rigidbody, transform and supports up to 20 components with a simple Interface to extend to new components
- Implemented a simple material system that leverages both the forward and deferred rendering pipelines
- Implemented 2D sprite animation and 2D Physics (Box2D). Also supports true type font rendering
- Implemented 3D skeletal animation and primitive 3D physics algorithms and responsive camera system
- Designed Highly optimised Batch Renderers for 2D and 3D primitives as well as 3D models for static and dynamic meshes

## Presentations

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### STEF'22 - Sony technology Exchange Fair

Tokyo, Japan

PRESENTER FOR AUTOMATING FAST GAMEPLAY TESTING USING IMITATION LEARNING

Dec. 2022

- Presented demos on how the system can be used with various engines/games to automate gameplay
- Participated in Q/A and discussion sessions

## Open Source Contributions

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### Bosca Ceoil

<https://github.com/TerryCavanagh/boscaiceoil>

BOSCA CEOIL IS A FREE, EASY TO USE TOOL FOR CREATING MUSIC!

- Maintainer of Bosca Ceoil for MacOS system
- Played a crucial role in extending the life and support of the software

## Education

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### Sreenidhi Institute of Science and Technology

Telangana, India

B.TECH IN ELECTRONICS AND COMMUNICATION ENGINEERING

Aug. 2017 - July. 2021

### Narayana Junior College

Telangana, India

CLASS XII

Aug. 2015 - Aug. 2017

## Hobbies

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- Gaming
- **Speedcuber** - can solve a wide range of puzzle before you say brrr.
- Badminton
- Amateur Guitarist
- Homebrew Development