



# Ketan Shukla

Passionate Game Developer with Expertise in Real-Time Rendering and Data Integration

Pune

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<https://www.codeinterstellar.com/>

## Profiles

[ketan-shukla-](#)

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## Skills

### 3D Graphics Development

- Proficient in three.js JavaScript library for creating 3D graphics applications. Custom shader development for three.js. Integrated GLTFLoader to efficiently manage and display 3D models within web applications.

### Rendering and Graphics

Expertise in OpenGL and Vulkan APIs Shader programming (GLSL, HLSL). Experience with multi-threaded rendering optimizations

### Data Management

Proficiency in data serialization and deserialization Asset streaming and loading techniques

### Tools and Frameworks

Familiarity with build tools (CMake, Makefiles) Knowledge of debugging and profiling tools for performance optimization

## Awards

### Ludo All Star-Best Game Of The Year 2019

Google Play  
Jan 2020

A real-time multiplayer mobile game with over 10 million downloads and 4.8 rating.

- Contribution:** Led the frontend development, implemented fixes and improvements engine level code, implemented gameplay and monetanization related features.

### BlockHeads - Best of Indie Games 2023

Google Play  
Jan 2024

[Blockheads-game-link](#)

**Contribution:** Developed Notifications, Ads services related SDKs, integrated Firebase for user data management, and collaborated on UI/UX improvements.

## Education

### Prof Ram Meghe College of Engineering & Management

Electronics Engineering  
8.2 CGPA  
Bachelor of Engineering

### Advanced Computing Training School - C-DAC

PG-DVLSI  
A+  
Post Graduate Diploma

## Summary

Passionate and experienced 3D Graphics Web/Game Developer with over 5 years of expertise in WebGL and hardware-accelerated 3D rendering. Skilled in utilizing the three.js JavaScript library to create immersive 3D graphics applications for the web. Adept at writing custom shaders and rendering effects, with a strong understanding of the programming and logic.

## Experience

### A5Labs

Game Developer

<https://a5labs.co/>

March 2024 - Present

Remote

- Optimized Rendering Pipelines:** Enhanced rendering operations in the Cocos Engine, focusing on multi-threaded task processing and asset streaming/loading.
- Developed core engine functionalities, integrating low-level programming techniques to optimize performance and scalability.
- C++ Development:** Developed and customized C++ engine-level code for Audio interfaces, Networking, serialization, deserialization, and rendering operations.
- Collaborative Development:** Worked closely with a global team of technologists and game developers to innovate and solve challenges.

### BombayPlay Games

Software Development Engineer - 2

<https://www.bombayplay.com/>

March 2022 - March 2024

Remote

- Notable Achievement:** Working on the Google Play Store Best of 2023 game, BlockHeads, using Cocos, C++, and TypeScript.
- C++ Development:** Building and Integration of SDKs in C++, Java, and TypeScript to streamline cross-project processes.
- Researched and implemented solutions for complex technical issues, developing comprehensive test cases to validate robustness.
- Game Development:** Development of games using Cocos and Unity game engine.

### Yoozoo Games

Software Engineer

<https://india.yoozoo.com/m/about.html>

Sept 2019 - March 2022

Pune

- 2D Rendering Pipelines:** Developed and optimized 2D rendering engine Cocos creator 1.9.3 and was involved in fixes in engine level code also co-ordinated with the core Cocos Creator team for the same.
- 2D Lightening and Gradient for Fonts:** Implemented shader programs for various rendering techniques, including 2D lighting and gradient effects by changing engine-level C++ code wherever required.
- 3D data visualization tool:** Built a real-time 3D data visualization tool using WebGL and three.js to display complex datasets in an interactive manner.
- Math Skills Application:** Applied strong math skills, including trigonometry and linear algebra, to handle various use cases in a game of bubble shooter.

### Vantage Systech Pvt. Ltd.

Trainee Engineer

May 2019 - September 2019

Pune

- Web Development:** Developed a chatbot for an educational website using React and NodeJS.
- Problem Solving:** Worked on the CodeZinger platform to solve problems in C++, Java, C#, and Python.
- Build custom Framework for testing using Python scripting.
- Dockerization:** Dockerized test cases in the UNIX environment with Shell scripting and Dockerfile.

## Projects

### WebGL-Based 3D Animation Showcase

Freelance Demo Project for a client

- Developed a web application to showcase complex 3D animations using WebGL and three.js.
- Utilized custom rendering effects to create dynamic lighting and shadows, enhancing the overall visual experience.
- Integrated user controls to allow for interactive exploration of the animations.

### Interactive 3D Model Viewer

Practice Project In a follow along tutorial

- Created a web-based 3D model viewer using WebGL and three.js, allowing users to interact with and explore various 3D models.
- Implemented GLTFLoader to manage and render 3D models efficiently.
- Developed custom shaders to enhance the visual quality and realism of the models.