

SUMMARY

Systems programmer and system administrator interested in Operating Systems, Computer Graphics, and Cloud. Can search for niche solutions on Google

EDUCATION

B.TECH COMPUTER SCIENCE AND ENGINEERING

CGPA 7.661

Indian Institute of Technology, Roorkee, India (2021)

CBSE 10+2 NON-MEDICAL (COMPUTER SCIENCE)

BOARDS 95.2%

Delhi Public School, Sector-19, Faridabad, India (2017)

SKILLS

LANGUAGES

Comfortable

Modern C++ 11/14/17, Lua, Python, Java, C, PHP, Go, Unreal Blueprint

Familiar

Bash, JavaScript, TypeScript, C#

FRAMEWORKS/LIBRARIES

Comfortable

Win32 API, DirectX 11, OpenGL 3, Unreal Engine 4, Godot Engine, SFML, GLFW, Terraform, AWS Boto3, GCP Client APIs, Helix Core C++ API

Familiar

Unity 3D, SUMO, ToroPHP, MySQL, Docker, OpenStack

TOOLS

Docker, Terraform, Version Control (Git, Perforce), IDEs (VS, VSCode, Eclipse), CMake, SCons, Vcpkg, Windows, Linux, MacOS

OPEN SOURCE

godotengine/godot VCS maintainer

godotengine/godot-git-plugin Maintainer

salesforce/p4-fusion Maintainer

sdsllabs/Rootex Lead developer

sdsllabs/Rubeus Lead developer

LATENT SKILLS

Very high communication skills.

Taking full service ownership.

Writing over-compensating documentation.

Flexible working hours.

EXPERIENCE

SOFTWARE ENGINEER ASSOCIATE MEMBER OF TECHNICAL STAFF

Salesforce, Hyderabad since June 2021

- My webinar with the CTO of Sourcegraph
- salesforce/p4-fusion - BSD-3 licensed, multi-threaded, C++11 tool to convert Perforce depots to Git repositories 100 times faster than the Git CLI.
- p4-fusion has been integrated into enterprise Sourcegraph to support their Perforce code host.
- Developing a completely new installation of Sourcegraph from the ground up, with a massive codebase present across multiple SCMs.
- Performing automations, maintenance and system administration for Perforce products being used at Salesforce.

CLOUD INFRASTRUCTURE COST OPTIMIZATION REMOTE INTERNSHIP

Salesforce Hyderabad 2020

- Implemented a cloud service agnostic, infrastructure crawling framework in Python 3 which crawls GCP and AWS in search of unlabeled, unnecessary resources.

GOOGLE SUMMER OF CODE 2019 AND 2020 VERSION

CONTROL SYSTEM INTEGRATION | CODE | DOCS

Godot Engine

- Developed and now maintaining Godot's VCS integration features, while being a part of the Godot Engine organization on Github.
- Mentored a feature expansion of the VCS Integration project in GSoC 2020.

3D TRAFFIC DRIVING SIMULATOR IN UNREAL ENGINE 4

INTERNSHIP

Robert Bosch, Bangalore 2019

- Integrated a traffic simulation engine using proper traffic rules called SUMO in Unreal Engine 4 which used the SUMO/TraCI API.
- Applied Unreal Engine's user interface and procedural generation tools to create a traffic behaviour data collection virtual environment.

PROJECTS

ROOTEX ADVANCED C++17 3D GAME ENGINE CODE | DOCS

SDSLabs, IIT Roorkee

- Featured on YouTube/Gamefromscratch
- Designed and implemented an ECS-based C++ game engine using DirectX 11 with a Lua scripting API and a Dear ImGui editor GUI.
- Implemented an frame-wise event manager, multithreaded resource loader, OpenAL audio engine, Bullet physics engine integration, DirectX 11 renderer backend for an overlay system using HTML/CSS/Lua, and other essential parts of a game engine like editor tools, overall architecture, post processing, profiling/optimizations etc.

RUBEUS C++17 SIMPLE 2D GAME ENGINE CODE | DOCS

SDSLabs, IIT Roorkee

- Implemented a 2D rendering engine in OpenGL 3.3 and a custom 2D physics C++ based engine written from scratch using simple collision detection algorithms.
- Designed other sub-systems in the engine such as audio, input, asset management, level loading etc.