

## 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.

## EXPERIENCE

### SOFTWARE ENGINEER MEMBER OF TECHNICAL STAFF

Salesforce, Hyderabad since June 2021

- Open-sourced and currently maintaining **salesforce/p4-fusion**, a 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.
- Webinar with Sourcegraph

### 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 STUDENT AND MENTOR | [CODE](#) | [DOCS](#)

Godot Engine

- Developed and now maintaining Godot's VCS integration features.
- 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

- 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.
- Featured on **YouTube/Gamefromscratch**

### VCS INTEGRATION - GODOT GAME ENGINE [CODE](#) | [DOCS](#)

Godot Engine, Github

- Maintaining the VCS feature set in the Godot Editor, which is written in C++.
- Fixing user reported bugs and feature improvements.