

R Pranav Ajay

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Education

Amrita School of Engineering

Bachelor of Technology Computer Science and Engineering *GPA: 8.04*

Ettimadai, Coimbatore

July 2018 - June 2022

Maharishi International Residential School Maharishi International Residential School

Sriperumbudur, Kanchipuram

Higher Secondary Education, CBSE Computer Science *GPA: XII - 455/500 X - 10/10 CGPA* 2016 - 2018

Experience

Caterpillar

Automation Engineer

Bengaluru, Karnataka, India

August 2024 - Present

- Worked on architecting and implementing pipelines for CI/CD for existing simulation applications and tool chains.
- Worked on deploying a Project Chrono fork in HIL(Hardware in Loop) and SIL (Software in Loop) environments.
- Worked on profiling the application performance on hardware environment and optimizing the application.

Associate Engineer

August 2022 - August 2024

- Worked on a Carla fork and was involved on creating scenario generation, implementing newer pipeline for the simulations
- Worked on a Project Chrono fork, implementing the scene graphs, overall simulation pipeline and asset handling pipeline.
- Worked on a SimPy fork, implementing scene graph wrappers for non-real time simulations and handling simulation logic.

College Intern

January 2022 - July 2022

- Worked on an Unreal Engine 4 fork and work on custom scenario generation, asset pipeline and scripting the simulations
- Worked on a pipeline involving Unity and propriety tool chains and focused on creating scene graphs for the simulations
- Worked on modelling the 3D assets involved in the simulation pipeline
- Got exposure to the C++ toolchains (Qt, CMake, vcpkg, msvc, clang) involved in the pipeline

Skills

Programming Languages: C++, JavaScript, Python, GD Script

Frameworks: Unreal Engine, Project Chrono, Godot Engine, Blender, Three JS

Technical Interests: Web and Desktop App Development, Game Development, Computational Photography

Projects

Kreative Rum Godot 4, Blender, Krita

https://github.com/sairpa/kreative_rum

A Collection of all my projects pertaining to Game Development and pipeline

ToonLyt TensorFlow Lite, Kotlin

<https://github.com/sairpa/ToonLytV2>

An Android App with Pastiche creation abilities based on Google's pastiche tensorflow lite library

Artstation Krita, GIMP, Blender

<https://sairpa.artstation.com/>

A collection of my digital art, illustrations and edits

Content Creator Kdenlive, Figma, Blender, YouTube

<http://www.youtube.com/@palladiumos>

Created assets and animations for new releases and administrated the YouTube channel

User Interface Development Figma, Android Studio, Kotlin

<https://web.archive.org/web/20230306145421/https://palladiumos.com/>

Designed UI/UX prototypes and implemented them into the Android Apps