Sameer Karjatkar

I have dived into the unknown world of Unreal Engine and have developed plugins for Unreal Engine 5.0.3 5.1.1 , 5.3.   
  
I had been working in PLM domain industry with Dassault Systemes in the the past for 13 years . During this tenure I have worked on projects which involve Process Planning and Visualization products . The Primary skills used for these projects were C++ , Python , scripting , web services .  
Prior to Dassault I was working with companies like HCL, Mphasis & CMC .  
  
Out of Curiosity I also did a certification on Data Analytics & Machine Learning where we touched upon fundamentals of data science . In this course we used R & Python to perform data analytics and Visualization

**Certifications & University Graduations**

**R 3.3 . Completed a course on Data Analytics using R from edX https://courses.edx.org/certificates/2a10c318fda6430480852248c88ddc8a**

**COMPETENCIES**

**Operating System**: Windows 10/11, Linux **Programming Languages**: C, C++ 11, VC++ 17.0, Python 2.7.8

**GameEngines :** Unreal Engine Versions 5.0.3 **, 5.1.1,5.3,5.4.3**

**UE Frameworks Chaos,OpenXR**

**Tools: Git, Jira ,Jenkins,NSIS**

**Areas of Interest:** Computer Graphics

**Education**

**Bachelors Degree in Computer Science from Pune University, 1999 (63.4 %) Masters Degree in Computer Management from Pune University, 2001. ( 66.8 % )**

**Professional Experience Experience 22.0 years**

**Holo-Light: July 2024 -**

**Role : UnrealEngine Developer**

**Project: Stream Plugin**

**Product : UnrealEngine 5.4.3**

**Technology : C++ 17.0**

**The purpose of this plugin is to hook onto the UnrealEngine Render Pipleline and extract the frame and submit it to the upstream libraries . The frame is then consumed by Stream clients on the VR/XR devices**

**Ethosh : Feb 2023 – Nov 2023 : Consultant**

**Project: SoftBody Interaction**

**Product : Unreal Engine 5.3**

**Technology : C++ 17.0 , Blueprints**

**Using Unreal Engine Chaos framework we created a prototype where a user could interact with a softbody using a mouse . The intent is to allow a medical surgeon to interact with a soft tissue .**

**Project: GLTFCustomPlugin**

**Product : Unreal Engine 5.1.1**

**Technology : C++ 17.0**

**The purpose of this plugin is to extend the capabilities of the existing GLTF/GLB importer/Exporter . The current Interchange Pipeline importer does not support the import of draco compressed glb file into UE . Custom Property set in Blender are not imported into UE . Automatic creation of Blueprints from the assets imported is not supported .**

**We created a new Plugin which was a clone of the existing glb/gltf importer which now supports**

* **Import Draco Compressed GLB files into UE 5.1.1**
* **Integrated googles draco library into UE plugin modules**
* **Support Import/Export of MetaData(CustomProperties) into UE**
* **Automatic creation of Blueprint for the Assets Imported**
* **Map the tree hierarchy and nomenclature of the objects with that of blender**
* **Animation ,Materials sync**
* **Export of the BluePrint node to a GLB/GLTF file**

**PlanEYE: Sept 2022 – Sep 2023**

**Role : Unreal Engine Developer**

**Project: AssetImporer**

**Product: UnrealEngine 5.0.3**

**Technology : C++ 17.0**

Developed a Toolbar plugin for Unreal Engine 5.0.3 .  
This Plugin allows the user to View/select the assets he wishes to use in Unreal Engine before he actually imports .  
The plugin supports import of FBX,OBJ GLM/GLB assets, textures,Materials,Meshes . For GLB/GLM the plugin uses the DataSmith Importer library . The plugin uses the SLATE framework to build the UX .

**Project: CustomMultiUserEditor**

**Role : Unreal Engine Developer**

**Project: CustomMultiUserEditor**

**Product: UnrealEngine 5.1.1**

**Technology : C++ 17.0**

Developed a Toolbar plugin for Unreal Engine 5.1.1 .  
This Plugin automates the setup required for a MultiUserEditor plugin .  
The plugin will Launch a Concert Server, create a session and auto join the session .

The plugin also supports Level Change sync which the existing MultiUserEditor does not support

**Dassualt Systemes : July 2008 – Oct 2022**

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**Senior Technical Lead Product : Deltagen Domain : Visualization**

**Technology : C++ 11.0 / Python 2.7.8**

* 3DEXCITE DELTAGEN is the world’s leading high-performance software that delivers a highly-realistic display of 3D visualizations with real-time interaction. Data from all professional CAD systems is instantly brought to life in real-time and in outstanding visual quality, supporting the full value chain from design and engineering to marketing and sales.
* As a Technical Lead , I was responsible for low level design , code reviews and implementing Agile methodologies like grooming stories ,epic creation

**Product : Delmia Process Engineer Domain : Process Planning**

* The Process Planning and Analysis enables the user to define and analyze the process from a functional perspective. The PPR Navigator™ for Manufacturing is used for structuring and visualization of all the relevant planning data. It has an intuitive interface providing access to the information organized by Product, Process and Resource.
* Actively developed and maintained modules for the backend server COM / DCOM components

**HCL Technologies : Sept 2006 – July 2008**

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**Senior Software Engineer Product : CPORT**

**Domain : Investment Banking Technology : C++/Perl / Sybase**

* CPORT is a margining reporting product for derivatives market
* I was involved in developing perl scripts to process margin numbers for Funds and also generating reports for Fund managers

**Mphasis Software Sevices Ltd: Nov 2004 to Aug 2006**

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**Senior Software Engineer**

**Product : Regional Front End System Domain : Middleware**

**Technology : C++, Unix,Oracle**

* Regional Front End System acts as light weight switch which translates messages from customer transaction scripts which acts as query to the backend database
* I was involved in the backend development and maintenance of the product

**CMC : Nov 2003 - Nov 2004**

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**Senior Software Engineer**

**Product : Central Depository Accounting System(CDAS) Domain : Equities**

**Technology : pro C, Unix,Oracle**

* CDAS is a demat trading software which allows the Depository participants to register their trade contracts with the Bombay Stock exchange
* I was working on the backend server which creates the queries from the client requests and executes them on the back end database

**Interface Embedded Systems : Jan 2002 -Oct 2003**

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**Software Engineer**

**Product : Intelligent Lighting System Domain : Embedded**

**Technology : C, Unix**

* Intelligent Lighting system controls the platform lights based on the frequency of the trains that arrive on the platform
* I was involved in the development of the module which interacts with the serial port and sets the bits on the hardware port which triggers an on/off signal to the electrical levers