Madara Premawardhana

Software Engineer

⌂ portfolio.com   ⊙ madara.git   [in] li-madara   ✉ madara.email   ☎ 07394384255

EXPERIENCE

SIMCENTRIC TECHNOLOGIES (PVT) LTD. | SENIOR SOFTWARE ENGINEER

April 2022 – September 2022 | Colombo, Sri Lanka

- ➔ Designed and developed a file uploading automation toolkit using REST-api for Geoserver using Python.
- ➔ Worked with particle animation using Unreal Engine and physics.
- ➔ Designed Reactive environmental aspects such as reactive snow accumulation and reactive water similar to real-world physics.
- ➔ Unreal engine level design and development, character and vehicle modding and C++ programming of custom plugins.

| SOFTWARE ENGINEER

July 2020 – April 2022 | Colombo, Sri Lanka

- ➔ Designed and implemented a toolkit which allows users to create realistic real world environments using Unreal Engine which uses Open Source Raster and Vector data (GeoTIFF and shapefiles of map attributes).
- ➔ Worked with VR-Forces by MAK Technologies, VBS by Bohemia Interactive, Simulations, Unreal Engine by Epic Games, Blender, Houdini by SideFX, QGIS,Trian3DBuilder, Visual Studio 2013,2015,2017 and 2019 by Microsoft.

| TRAINEE SOFTWARE ENGINEER

July 2020 – April 2022 | Colombo, Sri Lanka

- ➔ Obtained hands-on experience on creating an industrial,commercial off-the-shelf software with the knowledge of UI/UX, transferring software system between technologies from JavaScript ES6 code to Angular based front-end and back-end and teamwork with agility.

PROJECTS

GEOSERVER DATA AUTOMATION TOOL | REST-API, PYTHON

2022

- ➔ python based project which automates the data uploading (including generation of workspaces, layers, styles etc.) on geoserver minimizing the repeating workload of a user.

TERRAIN GENERATION TOOL | C++, UE4

- ➔ This is an Unreal Engine EdMode plugin which allows users to create real world terrains using open source data. Uses openly available OpenStreetMap data for the generation of real-world locations inside Unreal Engine.

UNDERGRADUATE PROJECTS

- ➔ LSTM based intelligent system for identifying rainfall patterns and predicting water level patterns around a major reservoir in Sri Lanka. (Python)
- ➔ Archiva Based Log Processing and Management: An Expert system which identifies abnormalities of transaction patterns of customers and notify the bank administration.(TypeScript, JavaScript, Xcode)

see more projects

SKILLS

PROGRAMMING

Proficient:
C++ • C • Python • CSS • HTML

Experienced:
JavaScript • LATEX • Java

Familiar:
SQL • PHP

LIBRARIES/FRAMEWORKS

Familiar:
jQuery • Node.js • React

TOOLS/PLATFORMS

Git • Tortoise SVN • Docker

SIMULATIONS/CG

Proficient:
UE4 • UE5

Familiar:
Blender • Houdini • Sketchup

EDUCATION

UNIVERSITY OF BUCKINGHAM

PHD COMPUTING (READING)

Oct 2022 - Present

UNIVERSITY OF MORATUWA

BSc. (HONS) IN INFORMATION TECHNOLOGY

Jan 2016 | March 2020

Second Upper

PROFESSIONAL

BRITISH COMPUTER SOCIETY

BCS HIGHER EDUCATIONAL QUALIFICATION

Sep.2015 - Sep. 2017

Awarded Worldwide top candidate award