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Pavdeep Gill

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ArtStation
GitHub / Portfolio

Summary of Skills

Technical / General

- Modelled/Textured/Reduced File size/& Rigged Parametric 3D Construction Related Resources via Blender, as a Technical Artist for CadMakers, and integrated those resources to cmBuilder, which is a 100% web-based construction site/environment planning software.
- Know how to create and export custom texture maps (BaseColour, Normal, and OcclusionRoughnessMetallic) from Substance Painter, or using existing texture maps from Quixel Megascans, and applying them to game-ready mesh's in Unreal Engine.
- Used to procedural modelling workflow via creating HDAs in Houdini for UE4/5 export.
- Familiar with reading documentation to manipulate / troubleshoot nodes in UE4/5 & Houdini.
- Can use programming languages: C, C++, C#, Python, JavaScript (Three.js React), Houdini VEX, UE Blueprints, MATLAB/Simulink, Assembly Language, and also IEC 61131-3 languages (Ladder Logic, DDC Logic, Structured Text, etc.) to make executable programs, tools, scripts for functionality, games, websites, simulations, plots, and projects.
- In BCIT, for my 2020 Capstone Project I created a Robotic Hand (programmed an Arduino UNO to control 3D printed hand pieces), and for BCIT's Open House 2016, I made a LED Colour Organ Music Circuit (using analog components: resistors, transistors, LEDs, and IC chips).

Software

- Can use several 3D Digital Content Creation software's: Maya/Blender/Cinema 4D/ZBrush for Modelling/Sculpting/Rigging/Animating/Lighting/Rendering Hard and Soft-Surface assets**.**
- Know how to pack / layout UVs, and reduce High-Poly Meshes into Low Poly Meshes.
- Textured & Baked assets using Substance Painter, ZBrush, Quixel Bridge, and Marmoset.
- Proficient at using real time rendering engines: Unreal Engine 4/5, Marmoset, and Unity.
- Comfortable creating particles and simulations in Unreal Engine, Unity, and Houdini.
- Familiar with creating Blueprints, Shaders, Particles, Game Levels, and Cinematics in UE4/5.
- Used to using Editing and Compositing software's: Adobe Premier/After Effects and Nuke.
- Made various 3D Hard Surfaced Game Assets: Modular Building Pieces, Vinyl Player, Desk, Chair, Desk Lamp, Screw Driver, and Construction Equipment.
- Modelled/Textured/Lit/Rendered an entire Detective Room scene filled with small props (papers, keys, mug, phone, magnifying glass, pen, etc.) in Marmoset Viewer.
- Sculpted Low and High Poly meshes in ZBrush: Rocks, Statues, Brick Walls, Rocks, Ground planes, Keys, Trees, Fishes, Turtles, Gems, Characters, and more.
- Familiar with various sculpting techniques/methods/brushes: ZModeller, ZSphere, Retopology and Project, Masking, Smoothing, Dynamesh, ClayBuildup, Move, Polish, Flatten, and DamStandard.
- Can bring .FBX and .GLB 3D Resources rendered onto a webpage via THREE.JS.
- Comfortable with IDE's such as Anaconda's Spyder/Jupyter Notebook, VS Code, and Atom.
- Masking/Keying/Adding Motion Graphics via After Effects & Premiere / Nuke / Cinema 4D.

Education:

Seneca College, Toronto (North York), ON

- Certificate, Seneca Game Art & Animation (GAA) – Full Time January 2021 - August 2021

British Columbia Institute of Technology, Burnaby, B.C.

- Degree, Bachelor of Technology (Electronics) – Part Time September 2016 – May 2020
- Diploma, Automation & Instrumentation (ECET) – Full Time September 2014 – June 2016

Licenses and Accreditations:

- Accredited as a Graduate Technologist through Applied Science Technologists and Technicians of British Columbia (ASTTBC).

Work Experience:

Electronics Specialist / Teacher
Cloverdale Robotics Learning Inc June 2023 – Present

- Maintaining and Repairing: Educational Robots and Other Electronics Hardware
- Creating Class plans and the STEM Curriculum for afterschool classes. Then actually going to the approved After-School Programs around the Lower Mainland and teaching classes: Robotic, Coding (Python and Scratch), and Digital Arts

Unreal Technical Artist
CadMakers Oct 2021 – August 2022

- Primary person filling customer 3D resource requests (modelled, textured, reduced file size, rigged, rendered, and added features: repeating parametric textures, procedural mesh generation, and inverse kinematics to the resources and rigs) via Blender, according to online manufacturer specs. Then integrated the assets into cmBuilder (construction site planning web software).
- Made Unreal Engine Simulations of construction sites and also rendered 3D assets to webpages via WebGL and Three.JS (React).

Junior Application Engineer
Foxfab Power Solutions July 2019 – February 2020

- Generated Approval and Construction Drawings (AutoCAD) for Projects, Project Quotations, and worked on electrical enclosure designs by creating company brochures using Adobe InDesign.

Technical Support/Manufacturing Engineer
Algo Communication Products Ltd. October 2018 – July 2019

- Providing support to customers with Algo SIP endpoints for VoIP setup, multicasting, visual and audible alerting, paging, entrance security, configuring schedules, and emergency alerts.

Systems Designer
Control Solutions Ltd (CSL) - Fast Track Special Projects February 2017 – February 2018

- Designed HVAC control systems using Microsoft Visio
- Programmed, commissioned, and monitored HVAC DDC node-based control systems for clients.

Interests

- Enjoy working on VFX/3D Art/Animations/Video Games, Reading, and listening to Music: Rap, Hip-Hop, House, Pop, Disco, and Alternative Rock.