## **Professional Profile**

#### **Skills summary**

- Extensive experience in 3D modeling, texturing, lighting, particles, shaders, and in-engine implementation.
- Understanding of form, volume, weight, and scale.
- Familiarity with traditional art. Drawing, painting and sculpting.
- Well versed in the technical aspects of video game art such as topology, edge flow, UV unwrapping, texture efficiency, polygon efficiency, and modular modelling techniques.
- Strong knowledge of technical & artistic concepts unique to video game development.
- Experience with rigging, skinning and animation.
- Extensive programming and scripting experience. Both in-engine and development of external tools and applications; with a strong emphasis on graphics.
- Strong background in programming tools for content creation software such as Photoshop, 3ds Max, Maya, and MODO; as well as tools for engine editors such as Unity and Unreal.
- Experience working as a software engineer in the development of client-server model applications, frontend and backend.
- Reliable problem-solving and technical skills.
- Excellent team work skills. Able to effectively communicate and resolve complex problems as they arise.
- Have used Scrum and Agile methodologies. Familiarity with version control software such as Perforce, Plastic SCM, SVN and Git.
- $\circ\quad$  Great passion for video game development.
- Language skills: English (Fluent), Spanish (Fluent), Japanese (Business).

# **Professional Experience**

# Nov 2023 – Present | Technical Artist & Graphics Engineer KLab, Inc.

## Jan 2021 – Oct 2023 | Game Development Engineer / コンシューマゲーム開発エンジニア Marvelous, Inc.

- DEADCRAFT (Technical Art & Graphics Engineering Support) PS4, PS5, Xbox One, Xbox Series S/X, Switch & PC
- Story of Seasons: A Wonderful Life (Engineering Support) PS5, Xbox Series X, Switch & PC
- o Daemon X Machina Titanic Scion (Technical Art & Graphics Engineering Support)
- Project LIFE is RPG (Technical Art & Graphics Engineering Support)
- Silent Hope (Technical Art & Graphics Engineering Support) Switch & PC

# Sep 2019 – Dec 2020 | Technical Artist / テクニカルアーティスト

# VERTechs, Inc.

- Creation and development of 3D environments, simulators and visualizations in real-time engines for AI and automotive industries.
- Planned, developed, and maintained all technical art solutions in several projects. Including but not limited to shader development, rigging, tool development, pipeline setup, VFX creation and implementation, and animation setup.

- Took part in art-related tasks such as in-location photoshoots for reference and photogrammetry, art leading for 3D environment creation, lighting, art support, troubleshooting and optimization.
- Took ownership of several technical tasks such as in-engine tool programming, simulator "gameplay" programming, CarSim implementation, research & development, and technical problems troubleshooting.
- Conversion of HD Map data to OpenDRIVE format
- Technologies: Maya, Substance Designer, Substance Painter, Houdini, Photoshop, After Effects, RoadRunner, Unity, Unreal Engine, C++, C#, Python, Ubuntu, Windows, SVN

# Nov 2018 – Sep 2019 | 3D Simulation Engineer / 3D シミュレーションエンジニア Ascent Robotics, Inc

- Development and maintenance of simulators and related tools with the purpose of data generation and AI validation. Worked directly with the AI team.
- Research and evaluation of technologies and solutions for further simulation development.
- Infrastructure and automation related tasks for source control systems and continuous integration
- Technologies: Maya, Unreal Engine, C++, Python, Git, Plastic SCM, Ubuntu

# Nov 2017 – Apr 2018 | Freelance Technical Artist – Hello Ludo

#### Mech Mocha

- Visual development tasks for defining the look and feel of the game art and VFX.
- 3D modelling, texturing, animation, and rendering of assets for real-time in-engine implementation, as well as pre-rendered sprites and VFX.
- Had full ownership of the whole game art pipeline, tech art, animation, and VFX set up.
- Planned, produced and implemented most of the game VFX.
- Shader programming and optimization for all visual elements and VFX.
- Planning and development of Unity editor tools for faster testing and implementation of art and tech.
- Full ownership of all the gameplay frontend systems and engineering. Implemented in its entirety the gameplay frontend and its interaction with the gameplay backend.
- Documented and maintained all technical documents related to the frontend API and all the art, animation and VFX tech set up.
- Coordinated with the gameplay engineering team to plan, implement, test, and debug all gameplay features.

## Sep 2017 – Dec 2017 | Freelance Tools Programmer

## Numik

- Planning and development of software tools for 3ds Max.
- Tools were designed with the client's specific workflows and involved automating tasks such as texture and model processing, lighting, and the usage of tool data and settings across multiple workstations.
- Tools also interacted with external 3ds Max plugins and software such as ForestPack, RailClone, and Redshift Renderer.

• Tool development done primarily in MAXScript, as well as with the integration of external .NET libraries.

#### Jun 2017 – Oct 2017 | Freelance Environment Artist Studio Kikito

- o Modelling, texturing, lighting, and implementation of stylized environments in the Unity engine
- o Development of custom shaders as needed for the environments
- o VR Project

#### Jul 2017 – Jul 2017 | Freelance Software Engineer Rolamix

- Backend development for a web/mobile application
- Implemented missing features and endpoints (such as authentication and Algolia Search implementation)
- Cleaned up old code, added unit tests, and documented all the API's endpoints and features
- o Took ownership of the backend portion of the web app mid-way through its development
- Technology stack: JavaScript, NodeJS, S3, and MongoDB

#### Dec 2016 – Jul 2017 | Software Engineer

#### Wizeline

- Front-end development of a complex web application (My Home) using NodeJS, and React Redux for Realtor.com.
- Coordinated and worked alongside Move's team in the development of the web application.
- Was also involved in designing and developing chat bot web applications for specific clients.
- Worked with the UX and engineering teams to implement and develop both the backend and frontend components of the bots' interaction.
- Integrated the chat bots on the clients' websites and deployed them using Docker technology.
- Documented the internal APIs and the instructions on the usage of the applications.
- Technology stack included JavaScript, NodeJS, React Redux, MongoDB and RethinkDB as the main technologies.

#### Aug 2016 – Dec 2016 | Freelance 3D Artist & Technical Artist

#### Games2Win

• Was involved in modelling, texturing, optimization and engine implementation tasks of 3D vehicles for their car-themed mobile games.

#### Apr 2016 – Sep 2016 | Freelance Motion Graphic Artist – WeCO

- Was involved in planning, producing, and polishing motion graphic animations for the Kickstarter campaign of the project.
- Troubleshot and volunteered for smaller technical tasks such as video formatting and caption production and implementation.

#### May 2016 – Aug 2016 | Freelance 2D Digital Artist

- Produced 2D banners and promotional material for the following clients:
  - Earth Children for the Planet

- Earth Children for Humanity
- Vegans & Elephants

# Feb 2015 – Apr 2016 | 3D Artist & Technical Artist – Unannounced Mobile Project gumi Canada

- Was involved in graphics programming tasks such as shader programming, post-effects programming and development, rendering systems among other tasks.
- Programmed and implemented in-engine systems related to the visuals of the game, such as lighting processes, modular environments, procedural 3D art, and dynamic VFX systems.
- Designed, modelled, textured, lit, implemented, and troubleshot 3D environments and props used in the game. Iterated through them constantly according to the art & design direction of the game.
- Designed and implemented some environment-related VFX, as well as providing the necessary tech for their implementation.
- Supported the character department with rigging, skinning, scripting and some tool programming tasks.
- Optimized, implemented, and troubleshot processes related to the content creation software packages.
- Developed and supported both in-engine tools and external tools for designer and artist specific workflows.
- Worked with art, design, and programming teams to establish efficient workflows and processes, and constantly improved them as the project evolved.
- Troubleshot and supported the art and design teams with any art-related technical issues.

# Jul 2014 – Feb 2015 | Technical Artist – RBI Baseball 2015

## **HB Studios**

- Developed and implemented art related pipelines and workflows.
- Designed, created and maintained art related tools and scripts that improved specific workflows to achieve the visual targets.
- Provided and implemented technical solutions for art related features in-engine such as specific VFX tech, shaders, asset set up, lightmapping solutions, etc.
- o Troubleshot art related technical problems and implemented their solutions.
- Participated in modelling, texturing, lighting, rigging and skinning tasks related to characters, environments and frontend assets to be used in-game.

# **Education**

# Jan 2013 – Feb 2014 | Diploma in Computer Animation, Visual Effects & Game Design - Think Tank Training Centre.

• Specialized in Environment Art for games.

# Aug 2008 – Dec 2012 | Bachelor's Degree in Digital Art and Animation - Monterrey Institute of Technology and Higher Education.

- $\circ$  Video game development concentration.
- Participated in several experimental video game projects, responsibilities included planning, production, programming, 3D modelling, texturing and implementation tasks.

## Software & computer language skills:

**3D content creation:** Maya, 3ds Max, Softimage, MODO, Houdini, World Machine, SpeedTree, Motion Builder, and UV Layout.

2D content creation: Photoshop, CrazyBump, Knald, MARI, Substance Painter & Designer.

Digital sculpting: Mudbox, 3DCoat, ZBrush, and Topogun.

Game engines: CryEngine, Unreal Engine, and Unity.

Video and 2D animation: After Effects, Nuke, and Flash.

**Programming languages:** HLSL, GLSL, Python, C#, C++, Ruby, Java, Javascript, MaxScript, MEL, ActionScript, HTML, and CSS

## **Extra activities, Honors and Achievements**

#### Nov 2004 - Present | 14+ years of Martial Arts experience.

- Apr 2019 Present Mugen Ryu Karate
- Nov 2016 Mar 2018 Goju Ryu Karate
- o Mar 2015 May 2016 Tae Kwon Do
- Jul 2014 Feb 2015 Uechi Ryu Karate
- Mar 2013 Jul 2014 Sport Kickboxing Federation
- o Jan 2009 Apr 2009 Aikido
- Nov 2004 Mar 2011 Goju Ryu Karate

## 2023 | Was awarded Black Belt (shodan) in Mugen Ryu Karate style by Mugen Ryu Karate Do Tokyo

- o Successfully tested for and received my black belt after close to 4 years of consecutive training.
- 2014 | Finalist on CG Students' Awards 2014 Next-Gen Gaming category.
  - Game environment demo reel successfully considered as a finalist of the category.
- 2014 | Work featured on Cryengine's CryDev community's news and front page.
  - Game environment demo reel featured on Crytek's official community on February 21st of 2014.
- 2009 | Was awarded Black Belt (Shodanho) in Goju Ryu Karate Style by Goju Kan Karate Do Jalisco.
  - Successfully tested for and received my black belt after 5 years of consecutive training.