Spring Nguyen

Education

University of California, Irvine
Bachelor of Science in Computer Game Science   (May 2022)

Professional Skills

C++, C#, .NET, JavaScript, Python, HTML5, CSS, SQL | Git, Perforce, Version Control | Maya, Blender, Photoshop | Unreal Engine, Unity | Shaders, Graphics Programming | Jira, Confluence | Linear Algebra, Differential Equations, Multivariable Calculus | React.js, OpenCV, Mediapipe | AWS, Heroku | Design Documentation, Scrum, Agile Development

Work Experience

Reality Check Games LLC………………………………………………………………………………………(Nov. 2020 - Aug. 2023)
Software Engineer Manager / Technical Director
- Led a team of engineers in the development of five different game projects.
- Collaborated with producers, designers, artists, and programmers to implement game features.
- Programmed tools in Unreal, Unity, Blender, and Maya to improve development pipeline.
- Employed and enforced strict version control through Perforce and Git.
- Conducted regular code reviews and ensured adherence to coding standards.

CitrusBits LLC…………………………………………………………………………………………………(Mar. 2022 - Mar. 2023)
Software Engineer
- Developed and maintained an augmented reality app for Android and iOS platforms that uses machine learning and computer vision to perform full-body tracking.
- Worked closely with a team of developers, designers, and product managers to deliver high-quality mobile apps that meet customer requirements.
- Maintained and wrote technical design documents to help with the development process.
- Worked in Agile development methodology to deliver software in a timely and efficient manner.
- Utilized test-driven development and design patterns to create clean code.

The Louie Lab……………………………………………………………………………………………………… (Jul. 2021 - Mar. 2022)
Lead Unity Developer
- Developed an environment simulation game for biomedical students at UC Davis.
- Collaborated with researchers and instructors to design and develop game mechanics.
- Documented progress reports on weekly deliverables for the educational board.

Projects

New Haven……………………………………………………………………………………………………(Mar. 2022 - Mar. 2023)
- Designed technical aspects of the project and directed project scope and development.
- Implemented a runtime compiler that allows for logic and scripting in player dialogue.
- Reduced development time in half by creating a UI and VFX pipeline for the company.

MetaTope *(https://www.metatope.com/)*…………………………………………………………(Mar. 2022 - Mar. 2023)
- Created an inverse kinematics algorithm that converts camera input into humanoid movement.
- Trained machine learning models for AR full body tracking using a single phone camera.
- Developed recording feature for users to share live footage of their motion-tracked models.

Nijito……(Aug. 2021 - Nov. 2022)
- Developed a rhythm game framework supporting multiple modes of play simultaneously.
- Integrated a robust RPG system that affects gameplay mechanics and scoring.
- Wrote custom shaders to produce polished, low resource gameplay visuals.
- Designed a custom textured Bezier spline renderer using runtime mesh generation.

Space Zoologist *(https://louielab.org/SpaceZoologist/)*……………………………………………(Jul. 2021 - Mar. 2022)
- Developed an ecosystem simulation where plants and animals cohabitate in various terrains.
- Introduced efficient algorithms to reduce memory consumption and remove lag spikes.
- Developed a procedurally generating tilemap system that blends adjacent tiles.

Colormancy……(Jan. 2021 - May 2021)
- Developed an online multiplayer, arcade-style game attracting 25 separate investors at GDC.
- Developed a procedurally generated texture that handles real-time painting over the network.
- Implemented a modular spell system allowing custom combinations of different effects.