

OBJECTIVE

Create impactful gameplay experiences that give players desire to share what they've learned while leveraging a deep understanding of, and passion for, the game industry.

SKILLS

Game Design

- Design Patterns, System Architecture
- AI Pathfinding, Finite State Machines
- Collision & physics design
- Game engine animation
- UI/UX design and integration
- Localization tools and integration
- Rapid prototyping, QA testing, and iteration

Game Engines

- Unity (fluent)
- Unreal Engine 4 (familiar)

Leadership

- Constructive feedback, delegation, and lead by example
- Agile project planning and execution
- Train and mentor other developers of all levels
- Cross-functional communication

Programming

- C#, C/C++
- Python, JavaScript, Java, VBA
- Unity Shader Graph, HLSL, Cg, SDL 2
- WPF, WiX Toolset
- XML, JSON
- Jenkins CI/CD

Software

- Visual Studio
- Git, Perforce
- JIRA, Confluence, HackNPlan
- Adobe Photoshop
- Audacity
- Blender
- Microsoft Office, SharePoint, Google Docs

EXPERIENCE

QUALITY EXECUTIVE PARTNERS, Senior Developer

2021 - present

- **Virtuosi** (HTC Vive, Oculus Rift, Shipped 2022)
 - Lead software developer of a new in-house virtual reality development team for a suite of pharmaceutical job training simulations.
 - Trained a team of five (5) junior, mid, and senior developers on the entire Virtuosi suite of products, code, coding standards, quality validation, and learning management system (LMS).
 - Build, test, documented, and shipped the latest suite of three (3) VR training simulations.
 - Collaborated with subject matter experts (SMEs) to ensure all training material complied with industry standards, while also teaching and learning to speak each other's language (pharma and software).
 - Developed a custom Windows Bundle installer using WiX, improved a custom WPF application designed for end-users to easily complete VR training, and improved localization and LMS tooling using VBA and Python.

FOUNDRY 45, Senior Developer

2019 – 2021

- **Overall activities included:**
 - Advanced the core technologies used by the company to streamline the development pipeline and deliver to clients with increased speed and quality.
 - Lead several projects directly from start to ship, including working with SMEs to hone the material being taught and ensure it complied with industry standards.
 - Helped grow the team in the candidate search, technical interview, and hiring process.
 - On-boarded new senior developers, and mentored junior developers, both with the goal of growing them to lead projects.
 - Localization, validation, functional requirements documentation, and quality assurance of many products.
- **Virtuosi** (HTC Vive, Oculus Rift, Shipped 2020)
 - Collaborated with a team of senior developers, artists, QA, analysts, and SMEs to develop 11+ Virtual Reality job training simulations that are now used worldwide by several top pharma companies.

- **Unannounced VR Customer Service Training** (*Oculus Go, Shipped 2019*)
 - Built a custom visual scripting language to parse an XML graph into video, audio, and interactive text sequences.
 - Delivered project ahead of schedule and above expectations.
- **Unannounced VR International Medical Aid Training** (*Oculus Go, Shipped 2019*)
 - Leveraged the visual scripting language developed in the Customer Service Training app to accelerate delivery to only a few weeks, and the delivered project showed equally rapid results when deployed to end-users.
- **Additional Unannounced Projects**
 - VR contact lens production machine maintenance, VR driver safety, VR shipping truck load/unload safety

NINJA MULTIMEDIA, Interactive Developer

2018 - 2019

- **Dropt** (*Android, iOS, Shipped 2018*)
 - GPS-located interactive AR ads/coupons app, where hundreds of users competed in real time for limited available items to capture and use at participating businesses.
 - Scripted local and remote SQL database APIs to give the app a significantly wider audience, while maintaining flexibility and stability in a live production environment.
 - Collaborated with clients, and in-house art, to build the polished product design (UI) and user experience (UX).
- **Unannounced AR Refrigeration Unit Tech Demo** (*iOS, Shipped 2018*)
 - Augmented Reality overlay on a 6-foot long model that showed real-time 3D models and animations of an industrial refrigeration unit's inner workings.
 - Scripted a runtime AR marker calibration system that allowed near-invisible AR markers to be placed by the end-user around (not on) the large model after transport to a conference. The client could quickly setup and calibrate on-site with minimal tech support.
- **Unannounced VR and AR Furniture Demo** (*Oculus Go, Android, iOS, Shipped 2018*)
 - Owned all scripting, UI, and UX with feedback from the client, delivered on three platforms for both augmented and virtual reality in two weeks.
- **Unannounced AR Mini-Game** (*Android, iOS, Shipped 2018*)
 - Real-time AR battle mini-game built for a local game studio's event at the Georgia World Congress Center.
 - Ported studio-provided assets (models, animations, particles, UI, audio) from Unreal Engine 3 to Unity.
 - Built UI, UX, Bluetooth transmitter AR location mapping, push notification system, and offline prize encryption and distribution.

SOLIDIA TECHNOLOGIES INC., Research and Development, Production Technician

2012 – 2014

- Planned and executed experiments to develop novel, potentially carbon negative cement technologies.
- Assisted with information technology needs of the company.
- Improved quality of final products in a dynamic experimentation environment.
- Maintained constant information exchange with every team member for efficient production of meaningful results.
- Documented and presented lab experiment results at weekly team meetings.
- Extensive work with many industrial chemicals and MSDS, as well as constant 5S safety and housekeeping compliance.

EDUCATION

New Jersey Institute of Technology

- **Bachelor of Science** in Mechanical Engineering *Graduated 2016*
- **Cum Laude** GPA 3.56
- **Top of the Class** Kinematics of Machinery, Communication for Engineers, Dynamics of Spaceflight, Aerodynamics, Robotics & Programmable Logic Controllers, Game Mod Development