

MARK FRANCALANGIA

+1(860) 867-0116 ◊ Groton, CT 06340

markgasus@gmail.com ◊ [LinkedIn](#) ◊ [Portfolio](#)

EDUCATION

Bachelor of Computer Science (BS), Southern New Hampshire University

October 2023

Software Engineering and Web Development (AS), New England Institute of Technology

September 2019

Achievements: 4.0 GPA, Honor Roll (2022–2023)

TECHNICAL SKILLS

Languages: C++, C#, Java, Python, HTML, CSS, JavaScript, Verse

Game & Engine Development: Unreal Engine (C++/Blueprints), Unity3D (C#), Panda3D (Python)

Backend & Architecture: REST APIs, MVC, Client-Server Networking, Scalable System Design

Databases: MySQL, PostgreSQL, Relational Schema Design

Infrastructure & Systems: vSphere, Ivanti, Hardware Integration, Vulnerability Management, System Deployment

Tools & Methods: Git, Docker, CI/CD, Agile/Scrum

Operating Systems: Linux, Windows

EXPERIENCE

IT Technician — *Systems Support, Hardware Integration, Networking, IT Support*

March 2025 - Present

Great Wolf Lodge - Mashantucket, Connecticut

- Provide technical support and troubleshooting for resort-wide systems, including POS/PMS, attraction hardware, and other guest-facing systems.
- Deploy and configure IT and hardware systems; perform break/fix, hardware repair, and manage tickets.
- Administer vSphere environments, assist with on-site installations, and handle vulnerability management.
- Collaborate with operations and engineering teams to resolve system-level issues.

Volunteer Software Engineer — *Panda3D, Python, Astron, MMO Architecture*

March 2018 - Present

Toons of the World Foundation — Toontown Rewritten

- Design and implement client-server gameplay systems for a large-scale MMO supporting thousands of concurrent players.
- Contribute to distributed backend architecture using Astron and Panda3D, focusing on scalability, state synchronization, and performance.
- Integrate persistent data systems and relational database structures for player progression.
- Maintain and refactor legacy systems while introducing architectural improvements for long-term scalability.
- Collaborate with cross-functional teams in iterative Agile workflows to deliver stable production releases.

Software Engineer Intern — *Unity3D, C#, MVC Architecture*

June 2023 - August 2023

Indie.io

- Developed and maintained gameplay systems and UI components using Unity3D and C# following MVC architectural principles.
- Implemented scalable feature updates and optimized runtime performance for post-launch releases.
- Collaborated with engineers, designers, and QA in an Agile development environment to deliver stable builds.
- Contributed to debugging, refactoring, and architectural improvements within existing codebases.

PROJECTS

Disney's Toon Tag Attraction Recreation — *Unreal Engine, C++, Blueprints, Autodesk Maya*

- Developed a networked multiplayer experience in Unreal Engine with core gameplay systems built in C++ and gameplay logic implemented through Blueprints.
- Emphasized smooth gameplay and robust network replication using Unreal's networking model, designing modular C++ systems for scalability and maintainability.
- Carefully ported and optimized 3D assets from the original Panda3D engine into Unreal Engine via Autodesk Maya, preserving the authentic feel while delivering a modernized experience.

Unannounced Fortnite UEFN Experience — *Unreal Editor for Fortnite, Verse*

- Designed and implemented custom gameplay mechanics using Verse scripting.
- Developed modular interactive systems tailored for multiplayer environments.