

WORK EXPERIENCE

Senior Software Engineer

The Walt Disney Company February 2020 - Current

Led a team of engineers to develop a full end-to-end pipeline for real-time animation and virtual production applications. Drove the development roadmap for all technical aspects of projects, while managing changing priorities with creative and production leads in addition to communication with executive stakeholders.

Developed solutions to integrate real-time game enignes with digital content creation tools. Created an automated asset import pipeline to enable artists with no real-time experience to validate and publish their work in-context within the Unreal Engine. Created asset validators to ensure project assets complied with best practices for real-time asset creation. Developed automated performance profiling test regimes to ensure projects remained performant throughout the duration of production.

Managed engineering development for *Baymax Dreams* of *Fred's Glitch*, working closely with engineers at Nvidia to launch at the Sundance Film Festival the first premium, interactive short remotely rendered on GeForce NOW.

Developed solutions to enable build orchestration, centralize version control, and enable sharing of modular C++, Python, and binary assets across multiple projects with unique needs.

Further duties included on-set support, hiring, code reviews, mentoring junior engineers and interns, vendor evaluation, software and hardware procurement.

R&D Engineer

The Walt Disney Company
December 2017 - February 2020

Created tools and managed external development for a real-time animation pipeline. Contributed to development roadmap planning and vendor contract milestone setting. Developed R&D prototypes for playtesting of game mechanics for interactive experiences. Contributions to R&D projects resulted in several patents for new industry techniques and tools.

WORK EXPERIENCE (CONTINUED)

R&D Intern

The Walt Disney Company September 2016 - December 2017

Gameplay Programmer

Virtual Basement LLC June 2014 - June 2016

Engineered gameplay, network, and user interface features for the multiplayer, multiplatform, third-person shooter *The Mean Greens Plastic Warfare* in Unreal Engine 4. Rapidly conceptualized and prototyped multiple gameplay systems and delivered key game functionality from pre-production prototyping through the post-release support phase.

Additional responsibilities included network optimization, bug tracking and resolution, and performance optimization.

EDUCATION

Bachelor of Science, Media Technology

Game Programming & Design Concentration Graduated May 2016, Magna Cum Laude Woodbury University, Burbank, California

AWARDS & ACHIEVEMENTS

Sundance Film Festival New Frontier 2021 Exhibitor for Baymax Dreams of Fred's Glitch

Unreal Engine Virtual Production Fellowship 2021

Technology and Engineering Emmy Award in collaboration with Unity Technologies for *Baymax Dreams*

Game Developers Conference 2016 Exhibitor in partnership with Microsoft's ID@XBOX initiative

SIGGRAPH 2015 Exhibitor in partnership with Epic Games

TECHNICAL SKILLS

C++, Blueprints, Unreal Motion Graphics, C#, Python, Arduino, Processing, openFrameworks

Unreal Engine 4, Unity, Perforce, Visual Studio, Jira, ShotGrid, Confluence, Xsens MVN, Faceware Studio