

SUMMARY

**Veteran software engineer** with 13 years of experience primarily in C# and C++. Previously a software engineer and **technical lead at EA** working on College Football. Completed a **Master's in CS from Georgia Tech** and released my own 2D puzzler on Steam. **Extensive experience working on projects and teams remotely.**

WORK HISTORY

**Space Cadet Interactive**

*Solo Developer on Bake Until Done*

January 2024 - Present

- Constructed a system in C++ for procedurally generating levels in a deterministic manner
- Integrated level generation system into *Bake Until Done*, being developed in Godot

*Solo Developer on Sam & MaRU (2021)*

August 2015 – August 2021

- Designed and implemented system for allowing the player to manipulate the physical interactions of objects in a level to solve puzzles
- Developed all code, art, content, and tools for puzzle-solving game using Unity and C#
- Designed custom programming language based on C++ syntax to teach coding principles
- Architected custom loading system and level editor for rapid iteration of puzzles with an object-oriented design focused on loose coupling of game dependencies
- Created all the production art and animation assets for the game
- Developed build system for packaging content to support different gameplay resolutions, localization, platforms, and release types
- Implemented multi-threaded puzzle simulation system to prevent brute force solutions

**Electronic Arts - Tiburon**

August 2021 – December 2023

*Software Engineer II & Lead – EA College Football 25*

- **Technical Lead** on Road to Glory mode for first College Football release in 10 years
- Implemented **networked** features from backend to UI in C++, while integrating with existing client/server codebase
- Developed best practices with other tech leads for our teams
- Broke down tasks and interfaced with producers and development directors to get work scheduled
- Worked closely with designers to ensure in-game features meshed with game design while working within technical and time constraints
- Created technical design documentation to meet design needs and guide other SEs
- Collaborated regularly with other teams working on both College and other games
- Reviewed code and other submissions from the team

**Tiltfactor Game Lab at Dartmouth College**

May 2016 – August 2021

*Programmer for multiple interactive digital arts projects*

- Developed iPad Swift apps, web pages, and PHP server tech for an award-winning interactive digital experience
- Implemented a neural network-based generative art piece that created unique images based on training a DCGAN with Python
- Created two JavaScript-based geometric art generation systems

**National Instruments**

August 2009 – December 2018

*Senior Software Engineer (2017-2018) on LabVIEW UI Team*

*Staff Software Engineer (2013-2017)*

*Software Engineer (2011-2013)*

- Designed and developed multiple high-profile LabVIEW widgets and controls
- Integrated new controls into a C# codebase with tens of thousands of classes
- Collaborated closely with design, UX, and infrastructure teams to ensure project success
- Engaged in an Agile development process, creating stories and breaking down tasks
- Reviewed code for the team and department to ensure code quality
- Implemented a control for displaying a 3D point cloud of hundreds of thousands of points with user interaction and without the need for hardware acceleration

*Senior Software Engineer on LabVIEW Web team (2018)*

- Developed multiple major features in a mixed C++ and JavaScript web application
- Served as technical point of contact for junior members despite short tenure on team

*Applications Engineer (2009-2011)*

- Directly supported customers and sales staff, resolving technical issues
- Became a technical lead in 100+ person department for LabVIEW and software issues
- Taught multiple customer-facing classes on our products in person and online

SKILLS

**Languages:** C/C++, C#, Python, GDScript, JavaScript, Rust, Swift, Java

**Frameworks/Engines:** Unity, Frostbite, Godot, WPF, Unreal

**Tools and Other Knowledge:** Git, Perforce, Visual Studio, JIRA, Agile, Steamworks

EDUCATION

**Georgia Institute of Technology**

January 2019 – May 2021

M.S. in Computer Science; GPA: 4.0

**Vanderbilt University**

August 2005 – May 2009

B.E. in Computer Engineering and Mathematics, Summa Cum Laude; GPA: 3.81