

## Career Goal:

I am a Senior Unity/C# engineer specializing in stabilizing complex real-time systems, improving maintainability, and supporting long-term product health. My passion is in making games and experimenting with new and innovative ideas. I focus on creating immersive experiences that connect people, with a strong interest in exploring unconventional approaches, including VR and AI-driven systems. I hope to continue using all these skills combined to continue to create great products.

## Independent Accomplishments:

### *StudioJAW (Owner, Software Engineer, Artist)*

*(September 2002 – present)*

- Project Exploration, an attempt to stand out and make the game I have always wanted with a community driven approach.
- AICom – A Companion AI suite, giving users the ability to create a fully custom AI companion with various LLM's and ability to interact with users in Virtual Reality.
- Creating various Unity Content "Skulds Content".
  - Created an award winning music video, "World.Execute(me);" (Venice Film Festival)
  - "Skulds Shader" a commonly used Unity shader.
  - A publicly sold avatar 'Jelly'.
  - 'Marker 3.0' a pen device users can add to their avatars to write with.
- Developed and directed the product: "Izanami's Dream Battle", published on Steam 10/31/2016. led a small team who assisted with a few aspects of the product.
- Self designed, developed and directed the product: "DigiBand", published in 2005 as open source.
- Various Contracts for Software development for various businesses throughout West Michigan.
- Various sub-contracts for IT repair and maintenance for businesses throughout the West Michigan region.
- Various hopeful web-application projects that never took fruition, but worth mentioning.
- Technologies used: C++, Muti-Threaded Development, OpenGL, PHP, CSS, CSS3, HLSL Javascript, jQuery, HTML, HTML5, LAMP, Adobe CS, OOP, Cubase, FL Studio, VST's, C#, Rest, TCP/IP sockets, Python, MVC, Python web services, Transformers, GPT, AI, AI Voice regonition, Windows Administration, Linux (Ubuntu) Administration, Adobe Cloud, Blender, HLSL shader development, Unity Engine.

## Curriculum Vitae:

### *Topps Digital (Client Engineer / Asst. Staff Software Engineer)*

*(Jan 2022 – Mar 2023)*

- Joined an actively developed live product during a critical phase to address performance, stability, and technical debt.
- Refactored and extended core Unity and C# systems to improve maintainability and reduce failure points.
- Designed and implemented tooling and workflow improvements to support ongoing content development.
- Contributed changes that remained in active use and supported continued product growth following my tenure.
- Lead various projects that involved planning, communicating with the team, and working with Quality Insurance to ensure product integrity:

- Upgrading Components of the engine to current versions, including Unity.
- Implementing Unity Addressable assets throughout the engine and making it as transparent as possible to end users.
- Developed an “Adaptive performance manager” to limit CPU/GPU usage of the apps to avoid overheating on mobile devices.
- Designed a Web Socket communications system for the game engine.
- Designed and developed various tools used by artists and UI developers to help debug and retain the integrity of the asset management and codebase.
- Technologies Used: C#, python, C, MVC, Rest, Websockets, bash, Ubuntu Linux, Jenkins, Unity Engine, Unity Cloud, github/git, HLSL shader development, Ubuntu Linux, AWS.

### *Barret Technology (Game Developer / Software Engineer )*

*(Nov 2020 – March 2022)*

- Contributed to late-stage development of regulated medical software, focusing on system reliability, performance, and robustness.
- Addressed critical technical issues identified during validation and deployment preparation.
- Implemented targeted improvements to support stability and future development efforts.
- Work contributed to continued product progress and operational stability after project handoff.
- Designed and Developed two games for the Burt Medical robot
  - Wireframing, planning and pitching the games to the marketing team.
  - Creation of the Music and Art for each game.
  - Design and Develop(Code) out each game.
- Worked on improving other games in the Burt Medical library by adding new art, music and functionality.
- Worked on the dev-ops and distribution of the Burt Medical robot games and software.
- Maintained and upgraded a customized OS for the Burt Medical console based on Ubuntu Linux, including special install and configuration scripts.
- Patch the Burt Medical robot software (drivers) with various fixes needed for games and console hardware to function correctly.
- General Research and Development of software and hardware for Burt.
- Technologies used: C#, python, C, bash, Ubuntu Linux, Unity Engine, Photoshop, FL Studio, Adobe Cloud, gitlab/git, Ubuntu Linux, HLSL shader development, AWS, Windows Server and hyperV, Blender, AWS.

### *The Glimpse Group (Project Manager of Productization, Staff Software Engineer)*

*(May 2019 – March 2020)*

- Conversion of Projects into Products, generalizing the product for a wider customer base.
- Develop and Design new features of various products, and developing the foundation for others.
- Infrastructure design for Social VR Products.
- Lead, teach, and train other developers for various projects and the technologies we use.
- Help with trouble shooting and re-factoring of existing products using various technologies.
- Technologies used: VR, HLSL, C++, Unreal Engine 4, C#, unity, HLSL shader development, blender, Adobe CS, python, and many others.

### *Virtual Reality at Western Michigan University (Software Development Engineer)*

*(Jan 2019 – Mar 2019)*

- Helped with polishing and redesigning physics component for a VR Nurse Training Simulation designed for the College of Health and Human Services.
- Develop and Design new features of the simulation.
- Technologies used: C#, unity, VR Physics Logic and Design.

*Level Data – Web Engineer (Web Application Developer / System Administration)*  
(Aug 2014 – Mar 2015)

- Contribute to wire-frames, specifications, use cases, and proof-of-concepts for web-based projects.
- Create Level custom pages, page fragments, etc. for PowerSchool and other customizable systems.
- Build web applications, ReST endpoints, JavaScript libraries, etc for specific applications and shared resources.
- Configure, administer and document the operation of web systems (apache, tomcat, etc) and the continuous integration system (source control, deployment).
- Contribute to the design and implementation of the Level Data Operations Application.
- Technologies used: Java(Android), GRAILS, Linux, PHP, CSS, Javascript, JQuery, HTML, SQL(MYSQL, Oracle, MS SQL), Linux Administration(Cent OS), Windows Server Administration (server 2008-2012), Apache, LAMP, HTML5, CSS3, Angular.js, OOP.

*Beakr Studios – Programmer (Web Application Developer / Android)*  
(Nov 2013 – Dec 2013)

- Custom OS design using CyanogenMod.
- Miscellaneous Web Application Development for various clients.
- Technologies used: Java(Android), Linux from scratch, PHP, CSS, Javascript, JQuery, HTML, SQL(MYSQL), Linux Administration(Ubuntu), Apache, LAMP, JQuery Mobile, responsive web design, HTML5, CSS3, OOP.

*Traumasoft – Senior Programmer (Web Application Developer)*  
(May 2012 – June 2013)

- Restored module(Application) for Fleet Maintenance.
- Created new policies, guidelines and procedures for programmers of the company.
- Aided in designing a new framework for the software.
- Developed documentation for training new employees, best practices, standards and tutorials.
- Trained new employees in Ember.js and JavaScript.
- Designed JQuery plugins for objects and ui components.
- A UI library for Ember.js designed for the new framework.
- Technologies used: PHP, CSS, Javascript, JQuery, JQuery UI, JQuery Mobile, HTML, SQL(MYSQL), Java(Android), Linux Administration(Ubuntu), Bash, EmberJS, Node.js, Enyo.js, handlebars.
- Technologies used: js/moustache.js, LAMP, nginx, Underscore.js, responsive web design, AJAX, REST, HTML5, CSS3, OOP.

*Eaton Corporation – Web Application Developer*  
(June 2010 – May 2012)

- Designed several new web applications in ASP/mootools used by many users internal to the company.
- Maintained and migrated all ASP/mootools/ASP.net web applications used by the Roadranger Field Marketing (RFM) department.
- Integrated all intranet material from the RFMs old intranet page to the new Oracle Site Studio content management site. (JavaScript)
- Technologies used: ASP(Classic), ASP.net, HTML, Javascript, Mootools, CSS, Windows Server Administration, photoshop, SQL (Oracle, Access, MSSql), VB.net, responsive web design, AJAX, HTML5, CSS3, OOP.

*Diamond Phoenix Corporation – Software Engineer (Web Application Developer)*

*(August 2008 – March 2009)*

- Developed an application for verifying pics with a barcode scanner using C#.
- Co-developed “Web Admin”, a PHP based web front end to the carousel system software.
- Built several front-end applications from template for various clients using C++.
- Technologies used: PHP, Prototype.js, C++, C#, Windows Forms, .Net, javascript, CSS, HTML, SQL (Sybase), OOP.

*Premier Products Incorporated – Head of IT*

*(September 2007 – August 2008)*

- Developed an intranet from ground up for managing the QAD, File, Mail, and Asterisk servers as well as communicating information.
- Managed and migrated all hard ware from one facility to another, as well as wiring and documenting the new facility layout.
- Designed from scratch, the Asterisk PBX system using custom ALG scripts and plugins.
- Technologies used: C++, Bash, Windows BAT, Windows Server Administration, Asterisk, Schedule tasking and Cron, photoshop, php, apache, linux, gentoo, QAD, postfix, progress, CSS, HTML, SQL (MySQL), OOP.