

**LEAD UNITY PROGRAMMER**

- Architect mindset combined with leadership and communication skills, backed by 15 years of game industry experience as a programmer (7 years) and designer (8 years).
- Roles include Lead Programmer on Project Create (Mixed Reality), Lead Level Designer on Tomb Raider: Underworld (Console), and Project Director on Math Monster Carnival (Mobile).
- Proven ability to solve complex challenges in scope and on schedule, while keeping business value and team needs in mind.
- Experience leading creative, multidisciplinary teams at all stages of development.
- Directed and managed contractors as the owner of a small game studio.
- Mentor to associate and mid-level programmers and designers.

**EMPLOYMENT**

<b>MAGIC LEAP, Plantation, FL</b> Senior Software Engineer	<b>2017-2020</b>
<b>PIPEWORKS, Eugene, OR</b> Engineer II	<b>2016-2017</b>
<b>OREGANIK LLC, Eugene, OR</b> Owner & Contract Engineer	<b>2013-2016</b>
<b>ZYNGA, San Francisco, CA</b> Narrative Designer	<b>2011-2013</b>
<b>BUZZ MONKEY SOFTWARE, Eugene, OR</b> Lead Game Designer	<b>2007-2011</b>
<b>VISUAL CONCEPTS, Novato, CA</b> Game Designer	<b>2006-2007</b>
<b>NEVERSOFT, Woodland Hills, CA</b> Game Designer	<b>2005-2006</b>

**EDUCATION**

<b>The Guildhall at Southern Methodist University</b> Certificate of Digital Game Development with a Specialization in Level Design	<b>2003 - 2004</b>
<b>University of Texas at Austin</b> Bachelor of Arts in English	<b>1996 - 2001</b>

## PROJECT HISTORY: PROGRAMMER

**PANCAKE PALS** for Magic Leap One and iOS

2020

*Senior Systems & Mobile Programmer (Unity)*

*Magic Leap*

An MR / XR / AR multiplayer game featuring custom spatial localization technology. And pancakes.

- **Architecture:** Built an extensible finite state machine to control flow of the entire game. Supports multiple user types and game modes. Built on top of TNet.
  - **Networking:** Uses RPC to synchronize states between host and  $n$  number of clients.
  - **Accessibility:** Generates a flowchart of states and transitions for testing and planning.
  - **Analytics:** Purely transition based. Enhances internal state awareness while debugging.
- **Mixed Reality:** Integrated Magicverse SDK called XR Kit while it was still in development.
  - Allows mobile devices to localize into Magic Leap maps, thus enabling multi-platform, networked, MR / XR / Spatial Computing scenarios.
- **Systems:** Consolidated a multi-scene, single-platform Unity project into a single-scene project that could be built for both Lumin and iOS.

**PROJECT CREATE** for Magic Leap One

2017-2019

*Lead Programmer & Creative Lead (Unity)*

*Magic Leap*

An award-winning MR / XR software toy described as “LEGO meets Toy Story.” State of the art.

- **Mixed Reality UI:** Built a natural interface for manipulating physically simulated objects in a mixed reality space using a 6DOF controller. Accepted as a talk for GDC 2020.
- **Architecture:** Built a robust and extensible system for combining, merging, cloning, and separating up to 256 modular objects. Includes a patent-pending real-time preview system.
- **Performance:** Refactored and optimized multiple game systems in situ.
- **Creative Lead:** Led a team of 10 through a collaborative production process in 2019.

**UNRELEASED PROJECT** for Oculus Touch, iOS, and Android

2017

*Gameplay & Systems Programmer (Unity)*

*Pipeworks*

A VR + Mobile Companion experience designed for therapeutic intervention.

- **Virtual Reality UI:** Developed natural interactions (head nod, hand gestures) for the Oculus Touch, including an API for interacting with objects either with the hand or at a distance.
- **Mobile:** Built a mobile companion app.

**UNRELEASED PROJECT** for PC

2016

*Gameplay Programmer (Unreal)*

*Pipeworks*

A third-person action game with a unique story and art style.

- **Unreal 4:** Built character and animation controllers using Blueprints and custom C++ code.

**UNRELEASED PROJECT** for iOS and Android

2016

*Gameplay Programmer (Unity)**Pipeworks*

A geolocation mobile app with fun user avatar customization and social hooks.

- **Systems & Performance:** Built an avatar creator with rigged skeleton deformation that could render over 5000 custom, animated avatars before slowing down.
- **UI & Data:** Implemented UI, analytics, and storage.

**MATH MONSTER CARNIVAL** for iOS

2015

*Project Director & Lead Programmer (Unity)**Oreganik LLC*

An elementary classroom math app. Built for The Center on Teaching &amp; Learning.

- **Director:** Directed art, sound, and vocal performance from contractors.
- **Designer:** Worked with professional educators to design novel, game-like exercises that tested and reinforced common core math concepts.
- **Mobile:** Built a mobile app that featured 3 exercises and analytics.

**EPIC SKATER** for iOS and Android

2014

*Lead Programmer (Unity)**Oreganik LLC*

A side-scrolling infinite skater. Built for Your Daily Fill and Kongregate.

- **Architecture:** Overhauled the work of 3 prior programmers to knit together a working game.
- **Systems:** Character control via finite state machines. Performance and optimization. In-app purchases. Analytics. The whole enchilada.
- **Management:** Oversaw contract programmer who handled Android-specific features.

<b>PROJECT HISTORY: DESIGN</b>
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**CHEFVILLE**

2013

*Lead Writer**Zynga***TONY HAWK: RIDE**

2009

*Level Designer**Buzz Monkey Software***PIONEER TRAIL**

2012

*Narrative Designer**Zynga***TOMB RAIDER: UNDERWORLD**

2008

*Lead Level Designer**Buzz Monkey Software***ESPN U: COLLEGE TOWN**

2011

*Lead Designer**Buzz Monkey Software***RISE OF THE SILVER SURFER**

2007

*Level Designer**Visual Concepts***TONY HAWK: SHRED**

2010

*Technical Designer**Buzz Monkey Software***TONY HAWK'S PROJECT 8**

2006

*Game Designer**Neversoft***ARMY OF TWO: THE 40TH DAY**

2010

*Boss Designer**Buzz Monkey Software***GUN**

2005

*Game Designer**Neversoft*