

# Zachary Johnson

## Lead Game Developer and Web Developer

[me@zachstronaut.com](mailto:me@zachstronaut.com)

### Proficiencies:

#### Game Development:

- C#, Unity
- Networking: PUN, Photon Fusion
- FMOD, MapMagic, ProBuilder
- Rewired, Cinemachine, Odin Inspector
- HTML5, WebGL, Three.js, Impact.js
- WebSockets, Socket.io
- Corgi Engine, PuzzleScript

#### Front End / Web Development

- JavaScript, TypeScript
- SASS, CSS
- Vue, React, Backbone.js
- Underscore, jQuery
- HTML5, WebGL, Three.js
- JSON, XML

#### Production Tools:

- Jira, Notion, Slack
- Google Docs, Excel
- Visual Studio, Sublime, Vim
- Version Control: Git, SVN, CVS
- Photoshop, Illustrator, XD

#### Back End / Web Applications:

- Vue, React, Backbone.js
- Node.js, Express, Socket.io
- WordPress: Themes, Plugins, API
- PHP, C# .NET
- Apache, Linux

#### Mobile Apps / Mobile Web:

- Responsive Design
- Objective-C
- Cordova, PhoneGap, Ejecta
- iOS, Android

#### Databases:

- Architecture & Administration
- MySQL, PostgreSQL, SQLite
- MySQL C/C++ API
- Mongo, Redis

### Professional Experience:

#### Lead Game Developer / Producer, Co-Founder

- [Space Mace LLC](#)
- October 2017 - Present

Directed studio team that released the multiplayer game **Joggernauts** for [Nintendo Switch](#), [Steam](#), and [Epic Games](#). Recognition includes SXSW 2019 *Gamer's Voice Award Nominee*, *PAX Best of the MIX 2017*, and *Official Selection Indie MEGABOOTH at PAX East 2019*.

Lead programmer for gameplay, tools, and GUI in C# /Unity. Completed full Nintendo Switch port. Designed and tested game levels with HTML5/JavaScript prototypes. Created automated level import tools in node.js. Managed publisher and external QA relations, project milestones, and team task scheduling.

#### Senior Game Developer and Lead Developer

- [We're Five Games](#)
- October 2020 - May 2023

Added new game modes and playable content in C# /Unity to existing codebase for launch of [Totally Reliable Delivery Service: Totally Delivered](#). Optimized networking data compression of ragdoll and physics-driven gameplay by over 45%. Added new online matchmaking features. Developed GUI for world map, network lobby, and options menus. Created localization automation tools in node.js.

Transitioned to lead programmer for an unreleased game title. Created a player character abilities framework and enemy AI systems in C# /Unity. Developed new low-latency network systems with C# /Photon Fusion and network testing tools in node.js. Coordinated with art and design departments to develop and run programming team sprints. Reviewed team code. Assisted writing of monthly and long term milestone plans.

#### Lead Game Developer (Contract)

- Ham in the Fridge
- January 2013 - July 2013

Lead programmer for [Beemo - Adventure Time iOS app](#) designed by Ham in the Fridge and Cartoon Network. Developed the mobile app and its mini-games using PhoneGap, Objective-C, and JavaScript. Designed all levels for Kompy's Kastle. Coordinated with the art team. App reached #1 in the Apple iOS charts.

#### Lead Developer, Founder

- [Zachstronaut LLC](#)
- March 2011 - Present

Over a decade of experience as a development resource, consultant, or partner in new business ventures. Roles include: game developer, software engineer, front-end web developer, mobile developer, technology consultant, and product user experience developer. **Select project portfolio at: [zachstronaut.com](#)**

Wrote technical articles and developed tech demos for my blog, building an audience of over 1.5 million unique users. Developed open source libraries and associated documentation pages.

#### Senior User Experience Developer

- [Worrell Design, Inc.](#)
- February 2010 - March 2011

User Experience (UX) development lead for a wide variety of products for global Fortune 500 clients in the consumer electronics and medical technology sectors. Liaison between design teams and clients for technical needs. Projects included mobile apps, desktop software, web services, and personal medical devices. Developed interactive user interface (UI) prototypes using HTML5, CSS, and JavaScript on a variety of platforms including iOS, Android, Mac, and Windows. Conducted user testing and ethnographic research in the field in Canada, Germany, and across the US.

## Web Manager

- [Student Unions & Activities \(SUA\)](#), University of Minnesota
- July 2005 - February 2010

Team lead for front-end and back-end web development. Directly facilitated work between art, marketing, and development teams. Developed and maintained many PHP/MySQL/Linux/Apache web applications with dynamic JavaScript front-ends. Defined department guidelines for code, CSS, web forms, and UI/UX while steering the University towards standardization. Facilitated and analyzed usability testing.

Developed custom touch screen building directory kiosks with HTML5/JavaScript. Launched two e-commerce retail solutions. Produced award winning web-based video games and accessible alternative activities. Wrote, directed, and edited an award winning video advertisement. Produced and distributed accessible, semantic web templates directly resulting in University-wide standardization.

## Software Developer, Founder

- Number 74 International, Inc.
- August 2001 - December 2004

Developed a Win32/C++ peer-to-peer Windows application and related server software using C and the MySQL API on a FreeBSD platform. Implemented TCP and UDP socket communication using POSIX C sockets, secured with Blowfish encryption and hash algorithms. Produced the website, license agreements, privacy policies, and other legal documents for the business product launch.

## Education:

**B.S. Computer Science** - University of Minnesota, Twin Cities, May 2004

University College London, United Kingdom, Spring 2003

- Focuses: 3D Graphics, Human Computer Interaction, and Neural Networks

## Additional Experience:

### Select Speaking Engagements

- [Fantastic Arcade 2018](#), Austin, TX
- [JS Conf EU 2017](#), Berlin, Germany
- [Fantastic Arcade 2016](#), Austin, TX
- [IndieCade East 2016](#), Queens, New York, NY

### IGDATC Committee Member

- [IGDATC](#), 2014 - 2019

### MinneWebCon Committee Member

- [MinneWebCon](#), 2008 - 2017

## Other Interests:

Fishing, LEGO, gardening, snorkeling, music, cooking, art, film, and travel