# Mike Kasprzak

#### **EXPERIENCE**

Over 20 years as a professional software developer, with a focus on cutting edge technologies for gaming and DevOps. I've been the lead architect of many game and online infrastructure projects. I ran my own company for about 10 years where I worked on award winning game titles, as well as doing a variety of consulting for other companies.

# **Tiny Titan Studios** — Senior Programmer

#### 2018 - PRESENT

Brought on to re-architect a C#/Unity game to support many thousands of simultaneous players online and in real time, as well as to setup and deploy the game to many low cost servers around the world.

The game was rewritten in C++ under my strict guidelines for maximum performance to run entirely on server, and the existing C# game was adapted in to a pure client. The game is supported by a fleet of nearly 40 servers running in 7 countries around the world. A dozen of those servers are backend, running a custom LEMP stack (Linux Nginx MySQL PHP), load balancers, and clustering optimized for speed with data and workload replication, redundancy, and security. The game/customer data is synchronized to a machine in the office, allowing us to run queries in real-time without negatively affecting the live game.

### **Itaas Inc** — Senior Developer, Consultant

#### 2013

Contracted by Itaas to work on-site at **Shaw Cable's** office in Calgary Alberta. With offshore teams, we developed an Android and iOS TV guide to the spec of the client using proprietary HTML5 stack. I lead the development of the TV guide UX based on designs provided by Shaw's on-site designer. It was built using standards complaint HTML, CSS, and JavaScript, running inside a proprietary web-view application developed elsewhere in the company.

Milestones were delivered on time and to spec. Customer was extremely happy.

In addition, I was brought in by Itaas as a consultant to provide HTML5 Training to the London Ontario office, in preparation for work with next generation TV set-top boxes

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#### TECHNICAL SKILLS

Expert with Assembly (x86, ARM, z80), C, C++, PHP, JavaScript, HTML5, and Bash scripting

Comfortable on Linux, Windows, OSX, FreeBSD, Android, Proprietary Systems, Custom Microcontrollers like Arduino

Both development on and deployment of full stack environments like LAMP and LEMP, as well as the development of fully customized stacks including C/C++ stacks with GCC, Clang, and proprietary tools and compilers

Development and deployment of many web technologies. HTML5, JavaScript, CSS, Preact (React), MariaDB/MySQL, Database Clustering (with and without Galera), Redis with Clustering and Sharding, Gluster Data Clustering

Use of real-time graphics technologies such as OpenGL, OpenGL ES, Fixed function and programmable pipelines, Fragment and Vertex shader programming

## OTHER EXPERIENCE

Many years of experience running a popular Open Source project, and decades of experience running an Online Community

In 2009 I co-authored a book "iPhone Games Projects", a book of wisdom on programming games for the iPhone published by Apress

An original active member of Intel's Innovator program

# **Digistump LLC** — Consultant

2016

Added support for the Oak development board/IOT module (ESP 8266) to the Open Source Arduino IDE. Users are now able to write code using the familiar IDE and target the Oak module. The work generally involved adapting a lot of C code to work with C++, and regular testing with the Arduino IDE to make sure it was working as expected.

# **Hemisphere Games** — *Consultant*

2011

I ported the popular game "Osmos" to Intel's AppUp platform.

# **Ludum Dare,** Online — Co-Founder, Developer, Caretaker 2002 - PRESENT

The world's largest Online Game Jam event. <u>ludumdare.com</u>

I'm part of the team that founded the event. Originally a hobby we ran together, today I am the sole person responsible for the event. I handle scheduling, manage the servers, and in general everything about running the event.

#### 2015 - PRESENT

Summary: I built a social network entirely from scratch that scales up to many thousands of daily active users.

Developed custom software and toolchain to replace our aging website. Uses JavaScript (ES6), PHP 7, Vagrant, Preact (React), Node, Rollup, GNU Make, and other modern web and development tools. Open source.

# Sykhronics Entertainment, London ON-Owner

2006 - 2015, ON HIATUS

Small award-winning independent game studio owned and operated by myself.

Sykhronics Entertainment was a licensed Sony PSP, Nintendo 3DS, Nintendo Wii U, Steam, Apple, and Android developer. Sykhronics also developed and published software for Amazon Kindle, Symbian, Nokia Maemo, Palm webOS, Intel AppUp, Intel MeeGo/Moblin, GameTree.TV, Microsoft Windows Mobile, Microsoft Windows Phone, Blackberry, Tizen, Samsung Bada, Linux, and Microsoft Windows.

Notable Released Projects:

Smiles HD (or sometimes "Smiles") - smileshd.com

Released for multiple platforms. Winner of multiple awards. Finalist in the **Independent Games Festival Mobile** in 2009.

#### AWARDS

GameTree.TV Developer Competition (2011)

Winner: Developers Choice Award for Smiles HD.

Intel Atom Developer Challenge (2010)

Winner: Most Elegant Design Award for Smiles HD.

**Bung 3rd Amateur Game Coding Competition (2000)** 

**Neo Geo Pocket 3rd Place** for SykoWar.

Bung 2nd Amateur Game Coding Competition (1999)

**GameBoy Runner Up** for Poke Da Mon and Combat Soccer.

#### NOMINATIONS

Independent Games Festival Mobile (2009)

**Finalist: Best Mobile Game** for Smiles.

Slamdance Film Festival (2006)

Finalist: Popcap's Casual Game Award for PuffBOMB.

# **Big Blue Bubble,** London ON — Technical Director

2004 - 2005, (Contractor in 2010)

**Game Development Studio**. I acted as the Technical Director while the company was a startup, advising and assisting the project leads, interviewing candidates, among other things. I also personally lead and developed several projects.

Atomic Betty - GameBoy Advance - Lead, Engine Programmer

Dragon Tower - J2ME Mobile - Lead Programmer

Mage Knight - Nintendo DS - (Prototype) AI Programmer

Connect 4 - Mophun Mobile - Complete Port (J2ME to C)

Barry Bonds Home Run History - Mophun - Complete Rewrite Port

**Porting Contract work in 2010** - Ported **Thumpies** game to Samsung's Bada platform.

# **Digital Illusions Canada,** London ON — Senior Programmer

2001 - 2004

**Game Development Studio**. Formed after Sandbox Studios was purchased by Digital Illusions. lead one of two teams at the studio doing handheld games. As the resident expert in our handheld division, I supported both teams technically, and established our shared workflow.

Barbie Gotta Have Games - PlayStation - Tech Lead, Programmer
Polly Pocket - GameBoy Advance - Tech Lead, Programmer
Secret Agent Barbie - GameBoy Advance - Lead, Engine Programmer
Diva Starz: Mall Madness - GameBoy Color - Tech Lead, Programmer
Jump Start: Dino Adventure - GameBoy Color - Lead Programmer

# **Sandbox Studios,** London ON — *Senior Programmer*

1999 - 2001

**Game Development Studio.** The first employee hired with GameBoy programming experience. This lead to us pursuing a variety of projects for the GameBoy family of systems. During my time I lead and supported several projects, until our acquisition by Digital Illusions.

**The Emperor's New Groove** - GameBoy Color - Engine Programmer **Hoyle Card Games** - GameBoy Color - Lead Programmer