# Jim Silvester

Programmer, Ai Engineer, Software Developer: Mobile Apps, Web, and Video Games

Merrickville, ON, Canada | (613) 912-9896 jim@extralargebacon.pizza | <u>LinkedIn</u> | <u>Portfolio</u> | <u>Github</u> | <u>Leetcode</u>

### **PROFESSIONAL SUMMARY**

Highly skilled Ai Engineer, Programmer, and Software Developer with over 10 years of experience. Specialising in Artificial Intelligence Machine Learning, Deep Learning, Reinforcement Learning and Neural Networks, as well as Mobile App, Front-End Web, and Video Game development. Named inventor on a patent. Developed mobile apps with user's bases exceeding 100,000. Well versed in all aspects of software development including: Planning, Analysis, Design, Implementation, Testing, and Maintenance. Experienced in designing User Interfaces, Novel Human Computer Interactions, and Video Games using an Agile Scrum Methodology. Proficient in Cloud Computing, ML Tools, Unit Tests, RESTful APIs, and sound understanding of OOP design patterns including MVVM.

# **SECURITY CLEARANCES**

Enhanced Reliability and Level 2 (Secret)

## **LANGUAGES**

C#, C++, CSS, HTML5, Java, JavaScript, Lua, MySQL, PHP, Python, SCSS, Swift, TypeScript

#### **TOOLS**

Android Studio, Angular, Arduino, Blazor, Bootstrap, Git, Google Colab, Keras, .NET, OpenCV, PyTorch, ScikitLearn, SciPy, TensorFlow, Unity 3D, Visual Studio Code, Watson, Xamarin, Xcode

#### **EXPERIENCE**

#### Software Engineer, Asatte Systems Inc, 2022 - Current

- Lead developer in the modernization of the Clinic Management System (CMS) and Central Research Database (CRDB), a national Canadian clinic management system and research database for Congestive Heart Failure.
- Responsible for taking legacy Microsoft Access, VBA, SQL server software systems and reimplementing them in the Blazor framework with C# code.
- Key heart failure hospitals across Canada and top heart failure researchers currently participate.
- Spearheading new Ai Integration features used to provide data-driven insights such as analysing patterns in a patient's medical history and current health data to predict potential health risks.

### Independent Contractor, Extra Large Bacon Pizza, 2020 - 2021

- Engineered and deployed websites for clients, showcasing code mastery in HTML5, CSS3, and JavaScript. Led the entire process from design to execution, utilising Visual Studio Code for efficient development and Git for collaborative version control.
- Meticulously designed and implemented a 2000 watt volcanic eruption LED mobile art installation for a Burning Man Art Car. Managed the complete engineering of the build, ensuring full reliability of installation for harsh weather conditions and usage.

## Intermediate Software Engineer, ASAP (Formerly BiteSquad), 2018 - 2020

- Integral part of a three-member front-end mobile app team, overseeing the entire engineering build, implementation, and debugging process of Android and iOS consumer apps. Employed Xamarin.Android and Xamarin.iOS, managing codebase through Visual Studio Code, Jira, Bugsee, and Git.
- Personally spearheaded screens implementation, ensuring pixel-perfect UI designs and seamless user interactions throughout the entire app..
- Monthly user bases exceeding 100,000, helping the company to expand the app's reach to over 50 cities in the USA.
- Implemented rigorous testing methodologies, resulting in a remarkable app crash rate of less than 0.1%.
- Thrived as a member of a cross functional team, actively participating in collaborative efforts of design and testing, contributing insights, and fostering innovation within the development process.

## Lead UI/UX Developer and Designer, Biointeractive Technologies, 2016 - 2018

- Responsible for the software development supporting first of its kind wearable smart strap technology which detects hand gestures and finger motion. Used primarily for gesture control, stroke rehabilitation, and repetitive stress injury monitoring.
- Designed and developed all software used for technology demonstrations, sensor visualisation, device connections, progress tracking, IoT controller, virtual reality controller, video game controller, and other assorted demos using Unity3D and Android Studio.
- Filed a patent as the principal inventor for titled: "Apparatus And Methods For Detecting, Quantifying, and Providing Feedback On User Gestures" (Serial number 16/763,769).
- Collaborated seamlessly with the hardware production team, ensuring a harmonious integration of software and hardware elements for a comprehensive user experience.

## Research and Teaching Assistant, Simon Fraser University, 2012 - 2016

- Developed several multiplayer video games used in experiments by a team of Ph.D Economists.
- Lead and mentored over 90 students in weekly immersive programming and design workshops, emphasising hands-on screen implementation and debugging techniques throughout the entire process.
- Teaching Assistant for the following courses: 4th year Advanced Game Design (three times), 2nd year Multimedia Programming for Art & Design (twice), and 2nd year Human Computer Interaction.

# Director of Technical Development, Global Advantage Consulting, 2010 - 2012

- Developed data visualisation tools that use dynamic data sets to help analyse global innovation systems.
- Designed and built several websites including the company's website, content management systems, and database driven websites.

## **EDUCATION**

**IBM AI Engineering Professional Certificate 2024** 

**IBM Applied Ai Professional Certificate 2024** 

**Simon Fraser University, School of Interactive Arts and Technology** 2012 - 2014 Graduate Studies Coursework

**Carleton University, School of Information Technology** 2008 - 2012 Bachelor of Information Technology – Interactive Multimedia and Design

Algonquin College, School of Media and Design 2008 - 2012 Advanced Technology Diploma – Interactive Multimedia and Design