

# Nathan Jervis | Resume

#12 293 Limeridge rd w – L9C 2V4

📞 +1 (905) 807 3399 • 📠 +1 (905) 389 6674

✉ nathan@nathanjervis.com • 🌐 http://nathanjervis.com

## Education

### McMaster University

*Bachelor of Applied Science (B.A.Sc.), Computer Science, In Progress*

Received 12/12 in all Computer Science courses so far

**Hamilton**

2012–2017

### Udacity

*Online Courses, 3 courses*

ST101-Stats (highest distinction), CS212-Design of Computer Programs, CS262-Programming Languages

**Online**

2011–2012

### Westmount Secondary School

*High school Diploma*

ICS4U (Software): 98%, TEJ4M (Hardware): 95%. Helped set up and run computer science club.

**Hamilton**

2007–2012

## Frequently Used Languages

**C#:** 5 years of experience

*Also studied .NET assembly to better understand the language*

**SQL:** 2 years of experience

*Also work extensively with LINQ*

**Javascript:** 1 year of experience

*Familiar with AngularJS as well*

**Haskell:** 1 year of experience

*Built a Domain Specific Language within Haskell*

## Experience

Contract Work.....

### NVC Software (formerly Eldidip Media)

*Software development consultant*

**Hamilton**

July 2011–Present

#### Contract Jobs

- Software Architect for Pastee
  - HTTP based web API developed
  - Mobile application built to query API and interact with system clipboard
  - Deployed systems to Windows Azure and Amazon Web Services
- Software Architect for CampusHelper
  - Designed and built database for storing student information
  - Built website for student interaction and deployed to VPS on HostGator
- 6 months with ResonateKT
  - Building test cases for WebReports system (an extension to Open Text Content Server)
  - Development of new commands within WebReport language
- Mobile Applications for Education for McMaster University (Dr Anand)
  - Find and fix bugs within existing iOS applications
  - Develop ideas for new applications

## Professional.....

### Quickee Inc

Hamilton

Lead Software Architect

March 2013–Present

Design, architect and create entire Quickee system, including client, server and database

#### ○ Responsibilities:

- Gather system requirements and design database structure
- Design an interface for the mobile application to communicate with the server
- Evaluate solutions for mobile applications, and decide on technologies
- Build a mobile application to facilitate ordering specials from local restaurants
- Build a server that will scale very easily, and allow for future changes

#### ○ Main Technologies Used:

- C#
- ASP.NET
- Azure Cloud Services
- HTML\CSS
- Javascript\jQuery
- Phonegap
- LINQ\SQL

#### ○ Accomplishments:

- Built cron job scheduler to work on Azure Worker Roles, and execute .NET functions
- Built tool to compress javascript, compile less code, zip code into package, and upload package to <http://build.phonegap.com> to build mobile apps

### Population Health Research Institute

Hamilton

Software Solutions Developer

February 2012–December 2012

Develop clinical trial management systems.

#### ○ Responsibilities:

- Develop websites and design databases
- Diagnose and fix bugs, documenting solutions using TFS
- Follow specification to create validated systems that comply to the user's needs
- Create reports and database views
- Help get new students get started at the work place

#### ○ Main Technologies Used:

- C#
- ExtJS
- LINQ\SQL
- ASP.NET
- TFS
- RDL/RDLC

#### ○ Accomplishments:

- Main developer for several projects including SAHARA clinical trial
- Built public website for assessing heart risk score <https://rome.phri.ca/interheartriskscore>
- Found security flaws, such as SQL injections, fixed flaws and led redeployment of project
- Assessed new technologies and alternatives to existing systems (such as mobile and SMS service)

## Technologies Familiar with

---

**OOP Languages:** C#, C++, Java

**Web Languages:** HTML, Javascript, ExtJS

**Assembly Languages:** MASM, .NET ILASM

**Other Languages:** Haskell, Prolog

**Source Control Systems:** Team Foundation Server, Github

**Server Tools:** ASP.NET, PHP, SQL, Azure, AWS

**Reporting tools:**  $\LaTeX$ , Markdown, RDL/RDLC, WebReports

**OS:** Windows (XP - 8), Mac OS X, Ubuntu, Debian, Android, iOS, WP7

**Development Tools:** Visual Studio (2005-2012), Notepad++, command prompt

## Volunteer Work

---

**Computing and Software Outreach Group:** Part of a group meant to try to get elementary and high school students interested in computer science

**Mobile Development Club:** Created and run a group to learn how to program for mobile applications and release a video game

**City of Hamilton Web Redevelopment Focus Group:** Provided input for the City of Hamilton as to which web technology they should use, and how the website should be designed

## Open Source Software Projects

---

Codeplex profile: <http://www.codeplex.com/site/users/view/mirhagk>

- **Open Song to Chord Pro Converter** - A simple program to convert songs stored in the Open Song format to the Chord Pro format, also made it to softpedia  
<http://www.softpedia.com/get/Multimedia/Audio/Other-AUDIO-Tools/Open-Song-To-Chord-Pro-Converter.shtml>
- **Matrix Reducer for Linear Systems** - A program to input a matrix for a linear system, and it will reduce it to Reduced Row Echelon Form, and output a  $\text{\LaTeX}$  file showing the steps it used to get there, along with what the matrix looks like during each step

## Awards

---

**Startup Weekend Hamilton:** 2<sup>nd</sup> place 2013, best execution of idea, only functioning app

**IEEE McMaster Programming Contest:** 1<sup>st</sup> place 2013

**Education Computing Organization of Ontario programming contest:** 3<sup>rd</sup> place Finals 2011, Regionals 2010

**Canadian Computing Competition:** 62<sup>nd</sup>/604

**Google Code Jam:** Made it to 3<sup>rd</sup> round, placed 920<sup>th</sup> out of 4200

**CISCO IT Essentials:** Certified

**Royal Canadian Mint:** Participated in competition to design software for next generation money

## Interests

---

**Programming Language Design:** the syntax of programming languages, how they are interpreted, and creating new languages

**Artificial Intelligence:** how computer algorithms can replicate human intelligence, and also learn from situations

**Productivity Tools:** tools created to assist programmers, or others, with doing menial tasks, freeing up effort to focus on more important matters

**Automating Processes:** systems built to completely automate certain processes, freeing up humans for more important or safer tasks, ie vending machines, self-check out systems, and dangerous items disposal

## References Available Upon Request

---