# VINCENT FILBY, B.C.S.

(289) 772-7300 • vfilby@gmail.com

### CAREER OBJECTIVE

To work with innovative companies and amazing development teams to build client-centered web/mobile applications that make a real impact on user's lives.

My mission is to make the world a better place through technology.

#### **SUMMARY**

- 7+ years of professional experience in software development
- 3+ years managing or mentoring employees
- 2+ years experience with business strategy and planning
- Started programming when 10 years old (more than two decades ago).

#### PROFESSIONAL EXPERIENCE

#### **Research & Development Director**

April 2010 - Present

EnterTech Systems Inc • Oakville, ON

EnterTech Systems is a unique company that is helping to bring biometric access control to the masses. As the director of research and development I worked directly with the founder to bring innovative and disruptive software solutions to the access control market.

#### **Research & Development Director**

- Worked directly with the CEO to develop technical business strategy
- Directly managed a research and development team of 3 people
- Implemented a plan to consolidate phone services to reduce monthly costs 500%
- Used TeamCity as a continuous integration server to increase build access and quality
- Instigated a customer support system to reduce are average response to less than 1 hour
- Liaised between employees and consultants to claim SR&ED tax credits
- Responsible for maintaining relationship with international partners
- Maintained relationships with national IT parts and service suppliers Compugen & Metafore
- Responsible for the hiring process (writing job posts, screening candidates & final decision)
- Attended Suprema partner conference in Seoul, South Korea in 2010 and 2011

#### **Lead Software Developer**

- Designed and prototyped a large scale, multi-tenant Cloud Biometrics platform using Ruby on Rails, Node, Postgres, Redis and Socket.IO
- Developed custom time & attendance reporting solutions using Ruby and Sinatra
- Developed a generic integration platform for access control panels that allows Suprema to integrate their biometric scanners with any panel using C#, WCF, WPF, NUnit and Quartz.NET
- Met with potential strategic partners and evaluated their technology/solutions
- Responsible for full life-cycle project planning: Gathering requirements, ordering parts, hiring contractors, implementation and testing
- Planned server infrastructure and supervised implementation including a PDC and ESXi host
- Attended Salesforce conference Dreamforce in San Francisco

## VINCENT FILBY

#### **Software Engineer**

Sept 2008 - April 2010

EveryScape • Boston, MA

EveryScape is an exciting company with a new approach towards online advertising using immersive virtual tours.

- Designed a relational database schema to store business information with support for international addresses and migrated existing data from a series of XML files to SQL Server 2005
- Migrated a custom XML/JSON API to use Microsoft's WCF framework, reducing the amount of legacy code maintained by the team and leveraging the features provided by WCF
- Improved performance of a data validation tool that analyzes more than 3.4 million files by 400% using a multithreaded approach and asynchronous data loading for immediate processing
- Designed a 'single sign on' system that allowed our users to access our ASPX website and our WCF API with the same login, leveraging Microsoft's Forms Authentication and Membership API
- Designed custom WCF channels to support 'single sign on' user authentication within our API
- Used SQL Server Profiler and execution plan analysis to identify slow queries and improve their performance
- Used ANTS Profiler to identify and refactor performance bottlenecks in the data access layer
- Designed an image API that can generate dynamic 2D views from our entire panorama library utilizing local server-side caching and internet level caching with Akamai
- Rapidly (2-4 weeks) developed a client account management portal using Drupal and Salesforce (updates to open source modules were contributed back to the community)
- Streamlined weekly deploy process to only push data differences rather than our entire dataset
- Added XML documentation comments to the build process for generating internal documentation and to ensure any comments in the code are up to date
- Refactored many separate legacy codebases to use shared code
- Worked remotely from a satellite office in Kitchener, ON
- Interviewed candidates and participated in the hiring process

#### **Search Systems Developer**

July 2007 - Sept 2008

eMedia • Guelph, ON

eMedia Interactive took over some of the domains held by Geosign. My primary work at eMedia was development and improvement of the distributed, high performance local search platform that powered TrueLocal and Restaurantica.

- Designed a centralized data warehouse for 14 million businesses and historical changes using C# and SQL Server 2005
- Developed a database API using SOAP that allowed clients to interact with the data warehouse
- Designed and developed the business logic and objects that are used in all facets of the search system (the data warehouse, Lucene full-text servers and web servers)
- Used Red Gate's ANTS profiler to optimize our search indexer by 75%, bringing the total index build time down to under a day for approximately 14 million records
- Used YourKit and ANTS memory profilers to indentify and remove memory leaks
- Used ArcView, Quantam GIS and Postgres w/GIS to analyze and import geographic data
- Configured and themed custom Drupal installations supporting 500,000 page views a month
- Designed and implemented a module for Drupal to manage, display and track affiliate ads
- Acting team lead for the search engine group when the official team lead was unavailable
- Aided in designing a search architecture that supports multiple data centers
- Used FxCop to ensure that all code adhered to best practices and standards
- Automated nightly builds, build verification tests and deploys to ensure code quality
- Attended Microsoft's MIX 2008 in Las Vegas, NV

## VINCENT FILBY

#### **Search Engine Developer**

TrueLocal • Guelph, ON

Jan. 2006 - July 2007

As a member of the core search engine group I was responsible for maintaining and improving the search engine used on http://www.truelocal.com and improving the quality of the data that powers the search. (Note: TrueLocal is now defunct and is simply a branded version of SuperPages)

- Designed a system for identifying and merging duplicate businesses in a very large database (more than 100 million records) using SQL Server Integration Services
- Led a team of four developers on a TrueLocal mobile application for the BlackBerry platform using NetBeans and the Blackberry JDE
- Interviewed and aided in hiring new developers
- Responsible for writing and maintaining software that securely stores and manages all client credit card information as well as an application layer to interact with the Moneris, InternetSecure and Authorize.NET
- Developed a parsing heuristic to determine location from a user-supplied free text (addresses, intersections, city names, state names, postal codes, airport codes, etc.)
- Gathered requirements and documented subsystems in a manner that allowed other developers to understand the rationale behind design decisions
- Responsible for finding data sources and recreating TrueLocal's base location data (city, state, zip/postal code) to improve accuracy and relevance of searches
- Analyzed, imported and manipulated GIS data using ArcView and PostGIS
- Attended offsite training for SQL Server Integrations Services
- Attended Search Engine Strategies 2006 (SES) Chicago, IL

#### **EDUCATION**

#### Postgraduate Research – Biomimetic Robotic Whisker Sensors

University of Guelph • 2003 – 2006

During my postgraduate research I worked as a graduate Teaching Assistant, completed graduate level courses and I conducted research on a whisker sensor based on a microphone and a real rat whisker. It is a fascinating topic and I recommend you ask more about it.

## B. Computing Honours – Software Engineering and Computer Theory

University of Guelph • 2003

My focus was on software engineering and computational theory. In my 3<sup>rd</sup> and 4<sup>th</sup> year I was a Teaching Assistant for upper level theory courses like Compiler Theory and Theory of Computation (DFAs, NFAs, grammars, Turing machines and more).

#### PERSONAL INTERESTS

- Photography with inanimate subjects and colourless worlds
- I have some mean guitar chops and some not-so-mean violin chops
- I love winter, especially snowboarding on fluffy powder
- Long distance cycling (my longest single day ride is 220km)
- Member of Toastmasters International