Charles Martin Virtusio

Software Developer virtusio.charlesmartin@gmail.com +1.647-830-1336 cmvirtusio.info github.com/cmvirtusio linkedin.com/in/cmvirtusio

Skills Summary

- Technical Skills: Web Development (Dynamic Web Pages), Web Development (SPA + REST API), Database Development (SQL and NoSQL), Software Tools Development, Scripting (Linux and Windows OS), Object-Oriented Design and Development, Windows Application Development, QA and Testing
- Programming Languages: C++, C#, Java, Python, JavaScript, Typescript, Perl
- **Serverside Frameworks**: ASP.NET(C#), Spring(Java), Django(Python), Express(Node)
- Frontend Technologies: HTML, CSS, Javascript, Bootstrap, jQuery, Angular
- Databases: Oracle, MySQL, and MongoDB
 Version Control: Git, Perforce, and SVN

Work Experience

Product Software Engineer

NVIDIA Corporation, Santa Clara, CA, USA

September 2016 - December 2016

- Designed and implemented tool using Perl and Python scripts to harvest metadata from disparate databases and Perforce source management for data analytics and statistical analysis
- Implemented Excel VBA scripts to improve data harvest and data mining processes for Shield Team

Desktop Developer

BicDroid Inc, Waterloo, ON, CAN

May 2015 - December 2015

- Used and analysed different multimedia framework, developing deep knowledge of different library architectures, multimedia codecs, Media Foundation and OpenCV
- Created tools for the QDocument security system, comprising of audio/video capture, playback and network remote procedure
 calls

Web Developer and Tester

Qicsend, Toronto, ON, CAN

September 2014 - December 2014

- Developed features that consumes secured in-house and third-party APIs using ASP.NET MVC
- Helped develop and test Qicsend.com (money remittance website) and the corresponding customer support application

Web Developer

Toronto Transit Commission, Toronto, ON, CAN

September 2013 - December 2013

- Enhanced existing web applications with JavaScript and jQuery to improve client-side performance
- Developed on features on ASP.NET framework, and re-formulated Oracle DB SQL queries to improve performance

Education

Bachelor of Applied Science in Computer Engineering

Co-operative Program, University of Waterloo, Waterloo, ON

September 2012 – June 2017

Relevant Courses: Cooperative and Adaptive Algorithms, Fundamentals of Computational Intelligence, Programming for Performance, Database Systems, Algorithms and Data Structures, Operating Systems, Computer Networks

Projects

Stocks Watchlists App

- Developed a full featured end-to-end web application designed to help users keep track of stocks.
- Created a secured RESTful web service on Spring(Java) using Oauth2 and a single-page application using Angular.

Risk Management Tool (Engineering Capstone)

- Developed a web application using the Django Web Framework that helps financial traders make safer, risk-informed decisions
- Architected and compared various metaheuristic algorithms, namely: Genetic Algorithm, Ant Colony Algorithm and Simulated Annealing; which attempt to find the optimal portfolio given N assets and their statistical features (e.g. mean, variance, skewness and kurtosis)