JON VOLKMAR

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SUMMARY

Software engineer with a penchant for C++ development and big data processing

Hands on experience with data visualization and graphics programming for research and creative applications

Academic work in machine learning and computer vision

PROFESSIONAL EXPERIENCE

2014-pres. — Software Engineer, *Microsoft Corp., Windows Shell*

· Development of telemetry infrastructure for text input: back-end data management, scripting against terabyte scale data sets, design and implementation of client-side logging infrastructure

· Design and implementation of pen and inking UX features in Windows Shell

2013-2014 — SDE, *Microsoft Corp., Windows Phone Text Input*

· Processing and managing of big data for language model features

· C++ coding on UI and accessibility features for text input

Feb 2013-Jun 2013 — Independent freelance software developer

· Developed functional prototypes of audio-reactive 3D visualization software, for the client's creative applications. 3D wireframes generated in low-level OpenGL react to changes in audio amplitude as well as generic OSC messages transmissible over a network

Summer 2012 — SDE Intern, *Microsoft Corp., Windows Phone Text Input*

· Data collection and prototyping for shape writing text input feature on the Windows Phone. Implemented with OS-level C++

2010-2012 — Part-Time Research Assistant, *Desautels Faculty of Management Department of Information Systems, McGill University*

· Research and development for a web-based instant messaging application, using Node.JS, JavaScript, HTML, CSS, deployment to an Amazon AWS server

· Design and development of a web scraper for data collection, implemented in Python

Summer 2011 — Program Manager Intern, *Microsoft Corp., Skype for Business (Formerly Lync)*

· Feature design for a mobile application, including management of requirements, team coordination, UI mock-ups, and authoring of specification documents

2010-2011 — Part-Time Software Developer, *Infocubed, Montreal*

- Development of an XML document authoring add-in for Microsoft Word, developed in C#
- Development of a data visualization add-in for Microsoft Excel, allowing data entered in a spreadsheet to be visualized on a geographic map

RESEARCH EXPERIENCE

Fall 2011   Researcher, *Reasoning and Learning Lab, McGill University*

- Research, and development in machine learning algorithms for autonomous robot navigation
- Data collection with Kinect sensor, programming of simulations and 3D visualizations

EDUCATION

2009-2013   B.Sc., Computer Science, *McGill University, with semester abroad at Freie Universität Berlin*

2007-2009   Undergraduate Music Student, *Western University*

2 years of Bachelors of Music completed, with 21 additional credits earned in the Department of Science