

NICHOLAS ARMSTRONG

MASc, EIT

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(519) 594-1219

SUMMARY OF QUALIFICATIONS

- Expert knowledge of software development with specific focus on user interfaces, web services, application architecture, and web application performance
- Experienced development manager; led Pravala's engineering organization and ship products across multiple languages, platforms (Android, Linux, Windows), and industry verticals (mobile, automotive)
- A proficient coder – frequently use JavaScript (node.js, backbone.js, react.js), C# (WPF), and Java (Android) in personal and professional projects
- Equally adept at designing and communicating complex systems, especially through intuitive diagrams
- Deep knowledge of networks and their effect on application performance; my thesis work developed a technique for decreasing web page load times over mobile (3G/4G) connections
- Driven to succeed - research, experimentation and iteration are key parts of my work ethic
- Hobbyist chef, Frisbee player, maker (primarily wood), curler, and piano student

WORK EXPERIENCE

HEAD OF NORTH AMERICAN SOFTWARE DEVELOPMENT

FEB 2016 – PRESENT

CARNEGIE TECHNOLOGIES (FORMERLY PRAVALA NETWORKS - KITCHENER-WATERLOO, ONTARIO)

- Expanded my previous role with Pravala Networks after acquisition by Carnegie Technologies
- Direct Carnegie's development teams in Kitchener, Ontario and San Antonio, Texas
- Lead global application architecture across Carnegie's communications products

VP ENGINEERING

OCT 2012 – FEB 2016

LEAD PROGRAM MANAGER

MAY 2009 – OCT 2012

PRAVALA NETWORKS (KITCHENER-WATERLOO, ONTARIO)

- Responsible for all engineering activities, from hiring and technical leadership to the design and implementation of Pravala's mobile and automotive products
- Manage customer projects, with responsibility for all project aspects including requirements, schedule, architecture, development, delivery, and customer relationship
- Code Pravala's horizontally-scalable policy management server (built with node.js and PostgreSQL), web management console (HTML5/LESS/backbone.js), and Android client interface (Java)
- Often support sales activities, present to customers, analyze competing products, and discuss product strategy
- Work directly with potential customers to demonstrate product capabilities and understand market needs

KEY ACHIEVEMENTS

- Represent Pravala in engagements with OEMs, automotive Tier-1s, and major telcos in the United States, Malaysia, Japan, Hong Kong, Indonesia, and China
- Supported Pravala's successful \$9.4m Automotive Supplier Innovation Program grant from the Government of Canada, including project definition and periodic project progress reports

PROGRAM MANAGER (PM) INTERN
SOFTWARE DESIGN ENGINEER (SDE) INTERN
MICROSOFT CORPORATION (REDMOND, WASHINGTON)

SEP 2008 – DEC 2008
JAN 2008 – APR 2008

- Managed the development of a WPF/Windows 7 sample application featuring multi-touch and ribbon integration for the 2008 Microsoft Professional Developer's Conference
- Developed photoSuru, an occasionally-connected photo viewing application, to demonstrate the highly differentiated experiences developers can create using WPF
- Assisted the WPF test team in testing new features of WPF to identify bugs prior to the release of .NET 3.5 SP1

KEY ACHIEVEMENTS

- Provided on-site support for the .NET Corporate VP's keynote demonstration of the WPF/Windows 7 sample to the 6,000 attendees present at PDC 2008
- Drove photoSuru's release to web (with full source code) at www.photosuru.com (since retired)

ADDITIONAL EXPERIENCE

MAKERCLUB VOLUNTEER
THEMUSEUM (KITCHENER-WATERLOO, ONTARIO)

OCT 2015 – PRESENT
(VOLUNTEER)

- Assist with monthly club for children as they learn maker skills - electronics, mechanics, art, repurposing, and more

ACADEMIC REPRESENTATIVE
FOR THE COMPUTER ENGINEERING CLASS OF 2009 (8 STREAM)

MAY 2006 – MAY 2009
(VOLUNTEER)

SOFTWARE CONSULTANT
SYSTEMGROUP, INC. (MISSISSAUGA, ONTARIO)

AUG 2006 – AUG 2007

- Responsible for developing various solution components using a range of Microsoft technologies in cooperation with clients and other consultants (C#, WPF, WCF, ASP.NET, SQL Reporting Services)
- Lead the development of a public website refresh for a not-for-profit organization

PROGRAM DEVELOPMENT
GREATER TORONTO AIRPORTS AUTHORITY (TORONTO, ONTARIO)

JAN 2006 – APR 2006

- Designed and developed a web application using ASP.NET/C# to tabulate training requirements and course completions for Facilities staff to ensure that all workers were up-to-date in their training and certifications

SOFTWARE DEVELOPMENT
HYDRO ONE NETWORKS, INC. (BARRIE, ONTARIO)

APR 2005 – SEP 2005

UNIVERSITY EDUCATION

MASTER OF APPLIED SCIENCE
UNIVERSITY OF WATERLOO – ELECTRICAL AND COMPUTER ENGINEERING

MAY 2009 – SEP 2011

- Thesis topic: *Accelerating the Mobile Web: Just-In-Time Push Prefetching*

BACHELOR OF APPLIED SCIENCE
UNIVERSITY OF WATERLOO – HONOURS COMPUTER ENGINEERING, WITH DISTINCTION - DEAN'S HONOURS LIST

SEP 2004 – APR 2009

MEMBERSHIPS AND PATENTS

ENGINEER IN TRAINING, Professional Engineers Ontario

CANADA PATENT #2791523, Accessing Local Network Resources in a Multi-Interface System

THIS RESUME IS ALSO AVAILABLE AT www.nicholasarmstrong.com/portfolio