

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; lead 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

UNIVERSITY EDUCATION

MASTER OF APPLIED SCIENCE

MAY 2009 – SEP 2011

UNIVERSITY OF WATERLOO – ELECTRICAL AND COMPUTER ENGINEERING

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

BACHELOR OF APPLIED SCIENCE

SEP 2004 – APR 2009

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

AWARDS AND DISTINCTIONS

ALBERT SHERWOOD BARBER AWARD

JUNE 2009

FOR BEST OVERALL WORK TERM AND ACADEMIC PERFORMANCE

ROCKWELL AUTOMATION CANADA AWARD

MAY 2008 – AUG 2008

FOR BEST WORK TERM REPORT, 4TH YEAR COMPUTER ENGINEERING

GERRY HECKMAN SCHOLARSHIP

MAY 2008 – AUG 2008

FOR ACADEMIC PERFORMANCE AND EXTRACURRICULAR ACTIVITIES

BERNIE ROEHL AWARD

JAN 2007 – APR 2007

FOR ACADEMIC PERFORMANCE AND EXTRACURRICULAR ACTIVITIES

FACULTY OF ENGINEERING ENTRANCE SCHOLARSHIP

SEP 2004 – DEC 2004

FOR ACADEMIC PERFORMANCE

GOVERNOR GENERAL'S ACADEMIC MEDAL (BRONZE)

JUNE 2004

FOR HIGHEST AVERAGE UPON GRADUATION FROM A SECONDARY SCHOOL

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

SEP 2008 – DEC 2008

MICROSOFT CORPORATION (REDMOND, WASHINGTON)

- Managed the development of a WPF/Windows 7 sample application featuring multi-touch and ribbon integration for the 2008 Microsoft Professional Developer's Conference
- Created developer tools and documentation for photoSuru, the photo subscription sample application I developed in my previous term with Microsoft in preparation for its release
- Surveyed line-of-business (LOB) application frameworks available for WPF as part of an effort to develop a strategy for LOB applications on the Microsoft .NET client platform

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

SOFTWARE DESIGN ENGINEER (SDE) INTERN

MICROSOFT CORPORATION (REDMOND, WASHINGTON)

JAN 2008 – APR 2008

- 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
- Designed and developed 'photoSuru 360°', a version of our existing sample application optimized for the Microsoft Surface to test the adaptability of existing WPF applications by running them on Surface using the Surface SDK

KEY ACHIEVEMENTS

- Primary developer on photoSuru, a developer sample released by Microsoft in December 2008

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
- Lead the development of a public website refresh for a not-for-profit organization by researching content management systems that would integrate with their existing infrastructure, developing the site based on their specifications, and deploying the website using DotNetNuke
- Supported the sales team by developing prototypes for potential clients using ASP.NET and CSS

KEY ACHIEVEMENTS

- Designed the user interface for a wealth management system developed for a large Ontario credit union

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)

- Acted as a liaison between the Department of Electrical and Computer Engineering and the Computer Engineering class of 2009 (8 stream), providing feedback to improve the quality of the undergraduate program

MICROSOFT STUDENT PARTNER

FOR THE UNIVERSITY OF WATERLOO

SEP 2007 – DEC 2007

- Promoted Microsoft technologies and products to students on the University of Waterloo campus by sponsoring student-run events and hosting technical demonstrations

TECHNICAL DIRECTOR

UW ENGINEERING DRAMA PRODUCTION

JAN 2005 – APR 2007

(VOLUNTEER)

- Designed the sound and lighting layout for the Engineering Society Drama Production and supervised the tech crew

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

MAY 2006 – AUG 2006
(VOLUNTEER)

- Acted as a liaison between the administrators of the PDEng program and the Computer Engineering class of 2009 (8 stream), providing feedback to improve the quality and value of the PDEng program

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

- Developed tools to monitor the performance of operations planning using Visual Basic and Microsoft Access

CERTIFICATIONS, MEMBERSHIPS, AND PATENTS

ENGINEER IN TRAINING, Professional Engineers Ontario

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

RADIO OPERATOR'S CERTIFICATE (AERONAUTICAL), Industry Canada

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