NICHOLAS ARMSTRONG

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SUMMARY OF QUALIFICATIONS

- Expert knowledge of application development with specific focuses on user interfaces, web services, and web application performance
- A proficient developer and program manager; coded and shipped products in C#, node.js, backbone.js, and Android Java
- Deep knowledge of networks and their effect on web 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
- Extremely adept at technology, having worked on projects using a wide variety of languages (JavaScript, C#, SQL, CSS, Java), tools (Photoshop, Illustrator, Blend), and platforms (Windows, Linux, Android)

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

 ${\tt University\ of\ Waterloo-Honours\ Computer\ Engineering,\ With\ Distinction-Dean's\ Honours\ List}$

AWARDS AND DISTINCTIONS

ALBERT SHERWOOD BARBER AWARD FOR BEST OVERALL WORK TERM AND ACADEMIC PERFORMANCE	June 2009
ROCKWELL AUTOMATION CANADA AWARD FOR BEST WORK TERM REPORT, 4TH YEAR COMPUTER ENGINEERING	MAY 2008 - AUG 2008
GERRY HECKMAN SCHOLARSHIP FOR ACADEMIC PERFORMANCE AND EXTRACURRICULAR ACTIVITIES	MAY 2008 - AUG 2008
BERNIE ROEHL AWARD FOR ACADEMIC PERFORMANCE AND EXTRACURRICULAR ACTIVITIES	JAN 2007 - APR 2007
FACULTY OF ENGINEERING ENTRANCE SCHOLARSHIP FOR ACADEMIC PERFORMANCE	SEP 2004 - DEC 2004

WORK EXPERIENCE

VP ENGINEERING LEAD PROGRAM MANAGER

OCT 2012 - PRESENT MAY 2009 - OCT 2012

PRAVALA NETWORKS (KITCHENER-WATERLOO, ONTARIO)

- · Responsible for engineering activities, including the design and implementation of Pravala's mobile products
- Manage joint project with major hardware OEM, with responsibility for all project aspects including project requirements, schedule, architecture, developers, release delivery, and customer relationship
- Architect and 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)
- Frequently participate in sales support, competitive product analysis, presentation writing, and product strategy
- Work directly with customers to demonstrate product capabilities and understand market needs

KEY ACHIEVEMENTS

• Represented Pravala in meetings and trials with major operators in Japan, Korea, Taiwan, and China

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

JAN 2008 - APR 2008

MICROSOFT CORPORATION (REDMOND, WASHINGTON)

- 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

Aug 2006 - Aug 2007

SYSTEMGROUP, INC. (MISSISSAUAGA, ONTARIO)

- 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

ACADEMIC REPRESENTATIVE

MAY 2006 - MAY 2009

(VOLUNTEER)

FOR THE COMPUTER ENGINEERING CLASS OF $2009 \, (8 \, \text{STREAM})$

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

SEP 2007 - DEC 2007

FOR THE UNIVERSITY OF WATERLOO

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

TECHNICAL DIRECTOR

JAN 2005 - APR 2007

(VOLUNTEER)

UW ENGINEERING DRAMA PRODUCTION

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

PDENG STUDENT REPRESENTATIVE

MAY 2006 - AUG 2006

(VOLUNTEER)

FOR THE COMPUTER ENGINEERING CLASS OF 2009 (8 STREAM)

• 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

IAN 2006 - APR 2006

GREATER TORONTO AIRPORTS AUTHORITY (TORONTO, ONTARIO)

• 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

APR 2005 - SEP 2005

HYDRO ONE NETWORKS, INC. (BARRIE, ONTARIO)

• 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