
PROFILE

Skilled software engineer with an MS degree in computer science and over 15 years of experience developing and shipping large scale software. Customer and user experience focused. Expert in iOS design and development. Strong problem solving and debugging skills.

EXPERIENCE

Senior Software Engineer/Tech Lead – Google Duo iOS

Nov 2014 - present

Google Inc., Kirkland, WA

- Built Google Duo for iOS, a 4.7 star cross platform video calling app based on WebRTC with millions of active users.
- Tech lead responsible for UX/UI of Google Duo app.
- Contributed to open source reference WebRTC service implementation (github.com/webRTC/apprtc). Improved material design, added new features, created Chrome App Store version.

Senior Software Development Engineer

May 2008-Nov 2014

Microsoft, St. Paul, MN

Office 365 Video (April 2014 – Nov 2014)

- Developed iOS Office 365 Video client application, including uploading, editing video metadata and localization.
- Developed back-end service running on Windows Azure, backing Office 365 Video service. Service is globally distributed and highly available.

Visual Studio/Expression Blend (May 2008 – April 2014)

- Integrated Cordova/PhoneGap tooling into Visual Studio in early prototypes/CTPs.
- Shipped versions 2, 3, 4 of Expression Blend, and Blend for Visual Studio 2012 and 2013.
- Primarily responsible for developing designer focused features using C#/.Net/Xaml. Created artboard/designer tools, including tools for layout, adorners to help guide and inform user, and live property editing for both XAML and CSS/HTML properties
- Created Windows 8 tooling for new HTML/CSS/JavaScript platform and new XAML platform, created new tools for users to create Windows 8 applications. Features include live css based styling adorners, and advanced css property editing features.
- Implemented CSS Styling tools/CSS parser & serializer. Was responsible for new features and maintenance of CSS parser/serializer code. Created support for new CSS properties and revisions to the CSS working draft. Created advanced css property editors for new CSS properties.

Founder – Software Engineer

April 2004-May 2008

ReconRobotics Inc., Minneapolis, MN

Co-founder of ReconRobotics Inc. Developed lifesaving robotic products. Primary responsibility was software development for Recon Scout robot. Other responsibilities included marketing, management and sales as needed.

- Developed and commercialized robots used by the military and police/rescue for lifesaving operations.
- Developed software for all portions of the product (mini recon robot platform). Developed in C for 8-bit Atmel RISC cpu.
- Guided company through CEO selection process and fund raising.
- Company has grown to over \$20mm in revenue per year, over 4000 robots in the field.

Research Assistant

May 2003 – May 2006

Distributed Robotics Laboratory – Department of Computer Science – U of MN

Designed and implemented novel robotics hardware and software algorithms. Projects included software and hardware design of miniature reconnaissance robot and operator control unit for military, as well as platforms specifically designed for research work and educational use. Worked with electronic design, motor control, firmware design/implementation, and high level software behaviors.

- Developed software for robotic platforms using C/8-bit cpus and C++ on embedded linux.
- Designed both low level and higher level software, including computer vision.

SKILLS

- Source control and agile software engineering process, CI/CD, shipping complex software, shipping shrink wrapped software.
- Expert in iOS, Objective-C, WPF/Silverlight/WP7/WP8/Windows 8 XAML technologies, C#, .Net
- Robotics: Electronics design, motor control, microcontroller firmware, communications, high-level behaviors, vision systems, machine learning.

EDUCATION

B.S. Computer Science (2003), M.S. Computer Science & Robotics (2005) – University of Minnesota
