



Martin Chung

Bridging Software, Design, and Customer Experience

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Profile

Demonstrated leadership, entrepreneurship, depth, and passion in building mission-critical software for challenging environments such as retail, banking, and healthcare.

20+ year proven track record of building and coaching agile teams to deliver enterprise-level, innovative, secure, scalable, usable, quality software on time and budget, leveraging the latest technologies and development processes including Lean and Agile/Scrum.

In-depth, hands-on expertise with all aspects of product management, including enterprise strategy, data-driven organizations, full stack software development, API design, customer metrics, search engine marketing, and conversion rate optimization.

Passion for improving the omnichannel customer experience (CX/UX) through aligning marketing, support, design, analysis, and software development to boost sales, conversion rates, and customer satisfaction.

Customer-facing skills and field consulting experience with excellent written and verbal communications, analysis and report writing skills, presentation skills, and a keen interest in teaching, coaching, and sharing.

Current and Past Clients

Best Buy Canada, State Farm Insurance, London Air Services, London Drugs, CIBC, Provincial Health Services Authority, RCMP, Government of Canada, Province of BC, Jean Coutu Group, Washington State Government, Suncor Energy, Shaw Communications, Telus, PriceWaterhouseCoopers, Richmond Go Karts, BC Women's Hospital, Vancity Credit Union, P&O Ports Vancouver, WorkSafe BC.

Skills

Software Team Management – manage cross-functional team of developers and QA, team coaching, software build master, secure and standard coding practices, rapid prototypes, version control and continuous integration.

Product Management – business analysis and strategy, building business cases, lean minimal viable product (MVP), roadmap generation, product management, competitive product evaluations and shootouts.

Martin Chung

Project Management – Agile (Scrum / KanBan) methodology, Microsoft Project, Team Foundation Server, Git, Jira, Trello.

Customer/User Experience – refining the omnichannel customer experience from pay-per-click, SEO, in-store, online, through to checkout and beyond; UX design and prototyping; usability testing advocate; conversion rate optimization; customer call centre improvement; information architecture; corporate branding and voice.

Software – Deep .NET (C#, VB, C++) software development; Enterprise, SOA, and SaaS Architecture; Enterprise Application Integration (BizTalk Server); MS SQL Server, MySQL; Commerce Server; SharePoint; Workflow Foundation; Visual Studio, XCode (Objective-C & Swift iOS app development); Windows, MacOS, Unix/Linux.

Web – HTML5, CSS, ASP.NET, Ruby, PHP, and JavaScript frameworks (Angular.js, jQuery, node.js); MVC (Ruby on Rails, ASP.NET MVC); memcached; Wordpress; Drupal.

API Design – SOAP, WCF, and RESTful web services design, versioning, JSON and XML parsing, authentication and security design (HTTP, OAuth, tokens), cryptography.

Security – application and web services security, internal penetration testing (Fiddler, Burp Suite), preparing threat analyses, satisfy OWASP and PCI DSS audit guidelines.

Infrastructure – Microsoft Windows Server experience and related systems engineering experience (previous Microsoft Certified Systems Engineer certification), AWS.

Web Marketing – Google Analytics Certification, Google Adwords platform, Google Maps Business View, social media marketing.

Media Creation – photography, cinematography, sound recording and design; Adobe Creative Cloud (Illustrator, Photoshop, Lightroom, Premiere, After Effects); DaVinci Resolve, Blend (3D modeling).

Speaking / Presentation – Microsoft Global Briefing presenter; CGA(CPA)-BC continuing education series presenter; Microsoft Developer Network author, presenter, and educator; .NET bootcamp instructor; photography club speaker.

Memberships / Certifications

Scrum.org – Professional Scrum Master (PSM) I, Professional Scrum Developer (PSD) I, Professional Scrum Product Owner (PSPO) I

Education

University of Victoria, Victoria, British Columbia, Canada - B.A. in Mathematics and History.

Martin Chung

Simon Fraser University, Burnaby, British Columbia, Canada - Computer Engineering.

Professional development such as Nielsen/Norman Group Usability Training, Mahan Khalsa Helping Clients Succeed, Google Analytics Academy, OWASP security, PMP credits.

Experience

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY - INSTRUCTOR - 2016-PRESENT

Part-time instructor for the New Media Digital Arts program. Teach and mentor students in the areas of HTML5/CSS3, Javascript and PHP scripting, web frameworks, responsive mobile web development, Scrum, and MySQL database development.

STUDIO IMPOSSIBLE – OWNER – 2008 - PRESENT

Owner of a media (photography and videography) studio, specializing in web software development, photography, film, corporate video, documentaries, 2-D and 3-D visual effects, agile business coaching and consulting for non-profits and small businesses.

Major Projects:

SURREY INTERNATIONAL WRITERS CONFERENCE

- Develop and deploy new website (www.siwc.ca) from scratch, migrating from Drupal to Wordpress architecture using custom post types, taxonomies, form properties, and plugins to implement an event management solution.
- Technologies: WordPress, custom plug-in development, REST web services, Drupal, PHP, JQuery, Visual Basic for Applications (VBA), Microsoft Word, Excel, Access.

LONDON AIR SERVICES WEBSITE

- Implement WordPress-based website (londonair.com) from scratch and create customize themes and install plugins as needed to satisfy the visual design.
- Ensure continued and improved SEO rank through redirects, keyword analysis
- Create photographic and video assets, including virtual tour.
- Technologies: WordPress platform, JQuery, PHP, MySQL, Apache, Plesk , Adobe Creative Suite, PTGui, Pano2VR.

LONDON DRUGS – SOFTWARE DEVELOPMENT MANAGER – 2006 - 2016

Directed all agile software development and UX activities for the London Drugs retail photofinishing division, involving multiple systems such as website (photolab.londondrugs.com), in-store kiosks, and in-lab workflow and manufacturing control systems. This group was run like a small startup within the larger corporate entity.

Martin Chung

Software Development Manager role: Managed (hire/fire/coach) a team of developers and QA. Coached and implemented agile/Scrum methodology with team and stakeholders, extensive hands-on coding, project management, release planning, and configuration management work. Performed numerous security audits and penetration tests.

Product Manager / Architect role: Worked with marketing, business unit, and IT infrastructure to align, define, prioritize, and achieve business, corporate, and IT requirements. Devised short- and long-term architecture roadmaps across 20 different systems. Created mechanisms to measure and report on key performance indicators. Conducted specialized R&D for special proof-of-concepts / minimum viable products.

User Experience role: Led web analytics and usability role tasks for the website. Implemented ways to identify and measure key performance indicators (KPIs) for UX, analyzed results, designed solutions for improving results (e.g. wireframes, paper prototyping, micro text changes).

Achievements:

- Consistently increased sales growth, enhanced product mix, reduced cost of goods, improved conversion rates and other KPIs in double digits year/year
- Coached and advocated Agile / Scrum approach through development team, IT and business unit
- Delivered high-quality, regular software releases across 20 different systems and multiple teams on aggressive schedules through process improvements
- Increased site uptime, scalability and reliability through code improvements (cloud storage, distributed caching, database optimization) and server logging and monitoring
- Implemented ways to segment, collect, and mine customer behaviour data
- Ensured continued adherence to internal and external security and privacy requirements, including PCI DSS compliance
- Championed UX/CX discipline within company, including building business case for UX/CX and making presentations to CEO/COO
- Reduced call centre volume and systematically reduced top customer issues through focused, continual, iterative improvement of the website UX and implementing cross-departmental problem triage and release planning
- Improved site organic SEO rankings to first page through focused catalogue IA, metadata, micro data formats, imagery, and content changes

Major Projects:

PHOTOLAB APPLICATION DEVELOPMENT ENVIRONMENT

Established a baseline development environment for all London Drugs Photolab development where sustained development of multiple systems could be accomplished

- Implemented Scrum/Agile, dedicated QA, TDD, UX, Continuous Integration

Martin Chung

- Implemented a multi-level development environment (developer, integration, QA, staging), including installing servers and software
- Implemented project boards and activity and bug tracking tools.
- Technologies: MSBuild, Team Foundation Server, Trello, FogBugz, Robocopy, Automation tools.

PHOTOLAB WEBSITE, CHECKOUT, AND WEB SERVICES

Continually architect and develop online photo finishing site (photolab.londondrugs.com) to improve user experience and sales. This customer-facing platform handles all imaging needs for the London Drugs photofinishing business, from order taking, image upload and storage, checkout/payment, through managing fulfilment -- a huge volume of sales and images every year.

- Designed and engineered new web services API layers (REST, WCF, SOAP)
- Implemented new web site pages for improved UX and SEO
- Worked to achieve and retain site PCI DSS compliance with payment engine (Moneris)
- Initiated first production use of Azure cloud computing platform in the organization.
- Technologies: ASP.NET 2.0 - 3.5, ASP.NET MVC, Microsoft Azure, JQuery, YUI, Bootstrap, WCF, Windows Workflow Foundation, SQL Server 2008 (partitioning plus filestreaming), XML, SOAP web services, Moneris (funds capture), HTML, CSS, Javascript, ASP.NET AJAX, Log4Net, MSBuild, Adobe Photoshop, Expression Blend, Silverlight, memcached, Google Analytics.

DEMANDWARE REST API INTEGRATION (UNIFIED CUSTOMER DATABASE)

Worked with Demandware (SaaS vendor) to build an interface from Photolab systems (.NET) to access authentication and customer profile services on londondrugs.com's cloud hosted Demandware system (Java) to enable a single unified customer database.

- Developed entire project from initial R&D and proof of concept to finished code base.
- By using web services and creating the right contracts and endpoints, all integrations work perfectly despite the technology and hosting differences between systems.
- Technologies: ASP.NET, .NET HTTP modules, PHP, REST web services, JSON parsers, HTTP debuggers.

PHOTOLAB WEBSITE DEVOPS AND SCALABILITY

The Photolab website services were implemented in a layered fashion across multiple servers in a server farm. UI tiers were physically and logically separated from web service tiers to allow for individual scaling. Various projects over time were initiated to align development activities with deployment and operations activities.

- Aligned release management and deployment with server operations and network operations teams to streamline deployment and hand-off processes.
- Implemented logging frameworks to facilitate automated server alerting (MOM / SCOM).

Martin Chung

- Provided ongoing support and troubleshooting expertise on underlying physical and virtual Windows server and SQL platforms.
- Ongoing work with security team to fine tune Netscaler / Palo Alto firewall
- Technologies: Windows Server, SQL Server, Log4Net, MOM/SCOM, Sharepoint.

PHOTOLAB ORDER MANAGER SYSTEM

The order management and workflow system and tools are responsible for distributing orders and images to 75+ locations for fulfillment.

- Discovered ways to integrate photo printing software and hardware to enable remote colour correction that even the printing equipment company thought was infeasible.
- Order Manager system uses workflows developed using Windows Workflow Foundation to allow non-code changes to business rules and routing.
- Conducted SQL Server optimization and profiling for performance improvement.
- Technologies: ASP.NET, ASP.NET MVC, WCF web services, XML, SQL Server Reporting Services, Windows Workflow Foundation, Windows Service programming, Process Monitor and other tools.

MICROSOFT CANADA ENTERPRISE SERVICES – CONSULTANT – 2001 - 2005

Enterprise Application Integration (EAI) and Development Consultant for Microsoft Canada. Responsible for meeting business development and customer satisfaction goals while providing consulting services to a wide range of customers and technology partners to ensure successful implementation of Microsoft technologies.

Achievements:

- Recognized as a key North America EAI, .NET development, and content management expert, resulting in engagements with many large corporations.
- Involved with saving many troubled technology projects by quickly determining root causes, establishing a remediation plan, and acting as intermediary between customer, partner, and Microsoft internal resources as necessary.
- Skilled at working with, and building rapport with, different customer workplaces and types of staff, from developers to architects/senior managers, through CxO level.
- Presented at several large developer conferences and was published on the Microsoft Developer Network. Taught .NET bootcamp courses to consulting firms.
- Involved with vendor Request for Proposal (RFP) responses, product shootouts / evaluations / comparisons against other competing products.

Major Projects:

STATE FARM INSURANCE LENDER INQUIRY (BLOOMINGTON, IL)

Martin Chung

Interface State Farm's internal EDI mainframe-based systems through BizTalk Server to integrate with external banks. I was one of the few Microsoft EAI experts in North America able to assist with this implementation and save the project.

- Implemented BizTalk Server messaging, XML transforms, and orchestrations required to tie in the different EDI X.12 document formats required by different U.S. lending companies.
- Technologies: ASP.NET 1.1/2.0, BizTalk Server Messaging and Orchestrations, SQL Server, Microsoft Message Queue.

BEST BUY CANADA CENTRAL MESSAGE QUEUE BROKER (BURNABY, BC)

The centralized broker is a custom intelligent scheduling and central bus agent that polls an Oracle database queue structure for tasks across the central head office and stores. Best Buy Canada wanted to investigate the possibility of simplifying the design using off-the-shelf Microsoft software instead of Oracle/Unix.

- Provided deep strategy and architecture guidance on Microsoft's persistent queueing technology (Microsoft Message Queues); created a demonstration system that included queue trigger agents that were fired when queue messages were received.
- Technologies: .NET (C#), Oracle DBMS, Microsoft Message Queue (MSMQ).

GVRD SINGLE SIGN ON (VANCOUVER, BC)

Implement a Single-Sign On system for GVRD. Several small systems had been built on ASP.NET but they had trouble building an overarching SSO implementation.

- A custom SSO system was developed using the ASP.NET 2.0 authentication system that helped to tie these diverse systems together in a way that did not require individual systems to be modified.
- Technologies: ASP.NET 2.0, SQL, LDAP/Active Directory, Cookies.

SNP (SINGLE NUMBER PORTABILITY) SHAW CABLESYSTEMS (CALGARY, AB)

Shaw Cable was beginning their Shaw Phone (VoIP) services and needed a workflow solution that ensured that existing phone numbers could be ported and provisioned from existing providers in a prescribed manner

- Created and demonstrated an asynchronous BizTalk 2004 system that tied in the multi-layered complex workflow that can span days or weeks.
- Technologies: .NET, BizTalk Server 2004, Web services connectors, Orchestrations.

CHANCERY SOFTWARE PERFORMANCE SCALING (BURNABY, BC)

Chancery software encountered severe performance problems with its flagship school management program in the massive (600 schools) Chicago Public School system. Since student attendance was being taken at the same time each morning, the load spike caused delays and crashes despite a massive investment in infrastructure and scaling.

Martin Chung

- Deep dive into code, SQL statement profiling, memory and code profiling, isolated issues in their custom development framework and recommended fixes.
- Technologies: .NET, SQL Server and profiler tools, code profiling tools.

ASP.NET 2.0 LAUNCH PRESENTATIONS (VANCOUVER, BC)

Work with Microsoft technology evangelist team as a presenter on the upcoming .NET 2.0 worldwide launch at various developer events

- Coordinated with .NET evangelists to generate and refine presentation material.
- Presented at Vancouver developer events that had rented out movie theatres for the launch event.
- Technologies: .NET Framework 2.0, WPF.

BC INTEGRATION BROKER BAKE-OFF (VICTORIA, BC)

The BC Government ran a major evaluation process to select between enterprise application integration offerings from IBM, Oracle, and Microsoft. I was on the team that worked on the RFP and ensuing bake-off competition where a simulated scenario was presented to the team without prior disclosure and a limited amount of time was allotted to solve the scenario.

- Assisted with written RFP response and presentation.
- Core member of RFP bake-off team, which had a successful outcome (the only vendor to solve the scenario in time).
- Technologies: Microsoft BizTalk Server, Visual Studio, Visual Basic / C++.

LONDON DRUGS – MANAGER, STRATEGIC INNOVATION – 1997 - 2001

Devised enterprise strategy for the retailer, evaluated software on a hands-on basis, initiated projects, and established best practices.

Heavily involved in Enterprise Application Integration, Point-of-Sale, loyalty programs, ERP, central customer database, Business Intelligence, analytics, merchandising, and other enterprise systems.

Achievements:

- Involved in retail industry standardization activities (ARTS, ActiveStore)
- Worked extensively to support adoption of Microsoft technology in London Drugs and build competencies to replace AS/400 systems development.
- Involved in the UX design of the next-generation Windows-based POS replacing IBM 4680 POS systems in specialized departments.

Martin Chung

Major Projects:

LONDON DRUGS ERP SYSTEM INTEGRATION

London Drugs embarked on a huge ERP system replacement in 2000 to update its merchandising and inventory systems. I was involved with the integration with the new ERP system with the legacy AS/400 systems using BizTalk Server and reliable message queueing technology (MSMQ) as the intermediary.

- Developed integration components and set up the required BizTalk artifacts
- Involved directly with Microsoft product group during beta and evaluation phase
- Gained technical expertise on large-scale, clustered and journaled MSMQ installations that pushed the limits of the existing technology
- Technologies: Visual Basic, BizTalk Server, MSMQ, SQL Server

LONDON DRUGS RETAIL SHELL

The Retail Shell is a shell application replacement for Windows that acts as a task switcher / monitor to secure the various full-screen applications running on a Point-of-Sale Windows terminal. This allows for rapid application level sign-on/sign-off and enhanced security between applications by limiting access to the underlying Windows machine.

- Wrote system from basic components, adding compatibility for different applications.
 - Added touchscreen capability and updates to support Windows API changes.
- Technologies: Visual C++ (MFC), COM components, Microsoft ActiveStore

Other Skills

Additional Languages - French (intermediate), Cantonese Chinese (basic), Malay / Indonesian (basic), Russian (beginner), German (beginner)

CSIA Level 2 certified ski instructor; PADI certified open water diver; Licensed amateur (ham) radio operator; British Columbia rally racing champion; metal fabrication and welding; automobile mechanic; electronics and microcontrollers (Arduino).

References

Available on request.