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## **SYNOPSIS**

Software Developer, Program Manager, and entrepreneur with a B.S.E. in Computer Science (Princeton University) and over 15 years of software design, project management, and development experience in a large organization (Microsoft), startups, and academia. Platform experience in Linux/UNIX, Windows, Windows Mobile, and web application development. USA citizen with a Canadian open work permit.

## **EXPERIENCE**

**McGill University**, Montréal, Canada: Research Assistant (Nov. 2008-present)

- Updated and debugged underwater camera remote control software (Java) to use Moxa IP to serial hardware for the Oceans 2.0 project based at the University of Victoria; optimized performance of system, culminating in successful control of remote hardware.
- Organize and troubleshoot experiments such as the World Opera, a simulation of two opera singers and a conductor performing together while located in different cities around the globe; assess technologies such as the video streaming performance of Adobe Flash, Theora, VLC/x264, and a Wowza streaming server for incorporation into a camera array system used for remote viewing of cadaveric dissections (HSVO); research issues and track requirements for multiple grant proposals.
- Create and maintain project tracking procedures and tools for McGill's Shared Reality Environment (SRE) lab. Establish and track deadlines for McGill's deliverables to large projects involving multiple partners, including the Health Services Virtual Organization (HSVO), Oceans 2.0, and efforts to create a portable gaming device for treating amblyopic children.

**FullMeasure.org** (personal project) (2006-2008)

- Conceived, designed and implemented web application to provide a neutral clearinghouse for quantitative investment ratings based on non-financial measures such as environmental impact, social responsibility, and religious beliefs.
- Implemented site using Ruby on Rails, Netbeans IDE, Subversion repository, MySQL database, Perl (for data gathering and parsing from the web), and Capistrano deployment to an Ubuntu Linux server.

**Glass Lantern, LLC**, Washington, DC (2002-2007)

- Founded Single Member Limited Liability Company focused on creating mobile software for professional photographers; designed and implemented entire product line in C/C++/Win32.
- Pocket PC products: PocketLoupe, a positively reviewed image viewer that reads information from RAW (camera proprietary) images; Pixfer, a mobile image storage, backup and management tool; CalTrack, a calorie tracker.
- Pixfer XP, a multithreaded Windows XP version of the Pocket PC Pixfer program.
- Windows Mobile Smartphone utility pack collection, and a SmartPhone port of CalTrack calorie tracker.

**MindSurf Networks**, McLean, VA: Director of Product Design (2001)

- Managed Product Design team including Art Director, two Graphic Designers, and an Experience Designer.
- Oversaw design aspects of the Mindsurf Achievement Essentials product suite, which allows students and teachers to collaborate via handheld computers in a wireless networked environment. Responsible for design specifications

and user workflow documentation.

## **Microsoft Mobile Electronics Group**, Redmond, WA: Lead Program Manager (1994-2000)

- Oversaw all aspects of Pocket Outlook software (Calendar, Contacts, Tasks, Note Taker) for three full product cycles: Handheld PC (released 8/1996), Palm-size PC (released 3/1998), and Pocket PC (released 3/2000).
- Directed first version of desktop personal information management (PIM) synchronization software.
- Drove components from initial design through final release, including determining user requirements and feature set, designing features, developing prototypes and storyboards, writing specifications, soliciting and incorporating usability and design feedback, setting schedule, and leading bug triage.
- Managed temporary staff and the Program Manager responsible for email functionality.
- Worked directly with product planners and technical staff at companies such as Hewlett-Packard, Casio, Compaq, and LG Electronics to define product requirements and resolve feature/technical issues.
- Oversaw/specified additional components at various points: Hardware requirements for OEMs, Shell & navigation, Pocket Word, Email, Calculator, physical keyboard design, and user notification system.
- Wrote initial draft of Palm-size PC Japanese specification.

## **NeXT Computer, Inc.**, Redwood City, CA (various 1991-1994)

- NeXT Campus Consultant responsible for technical/sales support for Princeton University.
- Managed the NeXT Educational Software CD-ROM project for EDUCOM '92 conference and implemented NeXTSTEP software to handle large electronic mailings for NeXT marketing team. (Summer internship)

## **TECHNICAL KNOWLEDGE**

**Expert:** C programming; **Knowledgeable:** C++, Win32 API (incl. Windows Mobile); Ruby on Rails, HTML, Subversion (SVN), Adobe Photoshop digital photograph manipulation; **Have used on occasion:** MySQL, Visual Basic, CSS, .NET, C#, Perl, AWK, Apache, Mongrel, Asterisk/Trixbox; **Operating Systems/Environments:** Netbeans, Visual Studio, Microsoft Windows CE / Windows Mobile, Microsoft Windows, UNIX, Linux, MS-DOS, NeXTSTEP

## **EDUCATION**

Princeton University, B.S.E. Computer Science, *magna cum laude*, 1994.

## **OTHER ACHIEVEMENTS, ACTIVITIES & KNOWLEDGE**

- Inventor on eleven issued US Patents, mostly related to mobile computing devices.
- Co-authored position paper accepted to ACM CHI '97 Issues in Wearable Computing workshop.
- Affiliate Member of McGill's Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT); completed Sony EX-3 HD camera accreditation.
- Former volunteer website contributor for the open source Tor Project.
- Basic oral and written French; currently enrolled in the McGill Certificate of Proficiency - French for Professional Communication program. As of Fall 2009 semester, completing the last class of the Intermediate level.

## **PUBLICATIONS / PRESENTATIONS**

Olmos, A, Brulé, M., Bouillot, N., Benovoy, M., Blum, J., Sun, H., Lund, N.W., and Cooperstock, J.R. Exploring the role of latency and orchestra placement on the networked performance of a distributed opera, 12th Annual International Workshop on Presence, Los Angeles, Nov. 11-13, 2009.

Bérard, F., Ip, J., Benovoy, M., El-Shimy, D., Blum, J. and Cooperstock, J.R. Did Minority Report Get it Wrong? Superiority of the Mouse over 3D Input Devices for a 3D Placement Task, IFIP TC13 Conference in Human-Computer Interaction (INTERACT), Uppsala, Sweden, August 24-28, 2009.