

# Robin Senior

23 COULSON AVE, UPPER UNIT, TORONTO, ON M4V1Y3  
416 627-0434

senior@gmail.com  
www.robinsenior.com

## Skills

### Software Development

Advanced: Objective-C (Cocoa and iOS), Java, C/C++, C# (WPF and Silverlight), Adobe Flex, HTML, CSS

Intermediate: Javascript, Ruby and SQL.

Experienced background in 2D and 3D graphics programming and animation. Proficient with OOP design patterns, including MVC. Equally comfortable using OS X, Windows or Linux.

### Interaction Design

Well versed in mobile, desktop and web interaction design. Expert in information visualization for both presentation and analytics. Highly experienced in user-centred design processes, including storyboarding, wireframing and observational analysis. Continually upgrading skills by attending conferences, seminars and participating in the UX community.

### Communication

Trained and experienced in writing and presenting for a wide range of audiences. Published and presented two papers in peer-reviewed conferences as well as authored over fifteen patent applications and several project proposals.

### Graphic Design

Accomplished graphic designer for both print and web. Have created several successful campaigns for musicians and theatre companies in Toronto. Designed and managed web sites for several artists and performers on a volunteer basis. Highly proficient with Adobe Photoshop and Illustrator.

## Education

### MSc, Human-Computer Interaction — Queen's University, Kingston, ON, 2005

Thesis: Ambient Google: Augmenting Conversation with Implicit Speech Queries

Courses: Human-Computer Interaction, Computer Vision, Image Processing, Pattern Recognition

### BSc (Honours), Computing and Information Science — Queen's University, Kingston, ON, 2002

Thesis: The Perceptual Effects of Bit Rate Upon MP3 Audio Compression

### Continuing Education

Mobile Web Design: Nielsen/Norman Group Usability Week 2009, Washington, DC

Workshop on Mobile Interaction Design: CHI (Conference on Human Computer Interaction) 2009, Boston, MA

Apple iPhone Tech Talk, December 2008, Toronto, ON,

## Publications & Attended Conferences

Robin Senior, Roel Vertegaal: *Augmenting Conversational Dialogue By Means of Latent Semantic Googling*. ICMI 2005.

Richard Brath, Robin Senior: *Visualization for Communication: The Importance of Aesthetic Sizzle*. IV 2005.

Ars Electronica 2006 & 2008, Linz, Austria

CHI (Conference on Human Computer Interaction) 2009, Boston, MA

International Conference on Multimodal Interaction 2002 & 2005, Vancouver, BC & Trento, Italy

FITC 2007, Toronto, ON

## Work Experience

### **SENIOR VISUALIZATION CONSULTANT, OCULUS INFO, TORONTO 2004 – PRESENT**

Responsible for design and implementation of software for visual analytics across a broad range of industries and government organizations. Projects have spanned mobile, desktop and web platforms, coupling highly graphical systems with advanced interaction techniques. Primary areas of work include visualization of massive datasets, 3D graphics, geo-temporal movement analysis, mobile communication and augmented reality.

Interaction design responsibilities encompass everything from creation of novel interaction techniques to wireframing, prototyping and creation of final artwork. Designed and ran user evaluation sessions to gather feedback and refine the user experience.

Software development experience includes 2D and 3D graphics for desktop and mobile systems, large-screen displays and distributed graphical systems. Primary technologies involved were OpenGL, GDI+ and Processing.

Recent mobile work includes collaborative mapping software for Android devices and a professional sports analytics application for the iPad. Currently developing a mobile visualization strategy for a leading financial data provider.

### **RESEARCH ASSOCIATE, QUEEN'S UNIVERSITY HUMAN MEDIA LAB, KINGSTON 2002 – 2004**

Created Ambient Google, a system for augmenting live conversation by identifying topics and creating visual histories. The goal of the project was to provide the user with a mind-map of their conversation without requiring them to interact with the computer. The system used clustering techniques and visual graph layouts to display contextually related sentences. Research involved speech recognition, natural language parsing and information visualization. Other in-lab research involved the design and evaluation of touch computing and eye tracking systems.

### **RESEARCH ASSOCIATE, QUEEN'S UNIVERSITY SCHOOL OF BUSINESS, KINGSTON 2001**

Served as technical lead for a joint project between Queen's and MIT, analyzing the technology transfer between academia and industry. Created and managed a database for querying patent and paper records, which was distilled and analyzed using custom-made Python applications. The resulting findings have been used by researchers to produce several publications.

### **WEB APPLICATION DEVELOPER, NORTEL NETWORKS, MAIDENHEAD, ENGLAND & OTTAWA, CANADA 1997 – 2000**

Designed and developed tools for Human Resources employees to efficiently manage job candidates. Managed content on Nortel Europe's external jobs site to simplify the application process. Created web-based applications for streamlining internal processes with custom-made content management tools. Managed web servers using Perl, Apache and other open-source software. Created custom web-based interfaces for internal communications and information delivery. Applications were designed for novice computer users with minimal training.

## References

Available upon request.