

## Sharon Minsuk

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<http://www.sharonminsuk.com/>

### Summary of qualifications

- Hybrid career: software development, and biological research (computational as well as "wet")
- Web development: JavaScript/jQuery, CSS, HTML, Browser Extensions, some PHP.
- Desktop app development: Java, C#, C/C++, Assembler, Fortran.
- Platforms: Windows, Unix/Linux, Mac OS X.
- IDEs: Visual Studio, NetBeans, and Xcode.
- Experience with all phases of the software development process, including design, implementation, testing, and documentation.
- Experience with both team-based and solo development.
- Excellent oral and written communication skills.

### Software development experience

Kachingle.com: Web development

- As Software Engineer, I transformed our JavaScript/jQuery widget, eliminating numerous bugs to make the component vastly more robust and reliable; enhanced the feature set; and made it work properly on mobile devices for the first time. This earned me "ownership" of that code, and promotion from Software Engineer to Senior Software Engineer.
- I introduced elements of CSS3 and HTML5 into the product where needed.
- As Senior Software Engineer, I broke through a major conceptual barrier in the overall design of Kachingle's product, which was limiting our opportunities to expand our customer base. Then I implemented the solution, which required browser extensions, so I learned to write them for Firefox, Chrome, Safari, and Internet Explorer, using JavaScript and C++. This project, dubbed "KachingleX" ([http://kachingle.com/kachingle\\_anything.php](http://kachingle.com/kachingle_anything.php)), inspired a major initiative involving the entire company. Its impact is still unfolding, so please check the latest news on our site and other web sources.
- As Director of Software Engineering, I took over technical leadership and direction for all areas of product development. Manage engineering team including software engineering, design, and QA. My own engineering projects now span the entire code base – from the browser extension to the website to the financial back end (PHP and MySQL).

C/C++ development

- Camera control module for open source microscopy image acquisition software (C++, Windows, Visual Studio).
- Biological computer simulation, modeling cell biomechanics (C, Carbon API, Mac OS X, Xcode). See <http://www.sharonminsuk.com/> for demo.

- Biological computer simulation, modeling cell interactions during frog embryo development (C, Unix on a Sun workstation).

#### Assembly language development (6502)

- Regularly and extensively used for 7 years; accounts for most of the code in the following:
- Clinical diagnostics software for use in sleep disorders clinics: real-time collection of analog data, analysis of physiological episodes, user interface.
- Several educational software products, spanning pre-school, K-12, and college level.

Award: *Learning Magazine's* Outstanding Software of the Year Award for "Square Pairs" (memory game, part of Scholastic, Inc. *Wizware* product line).

#### Biological research experience

- PhD and postdoctoral research on embryo development and evolution.
- Research presentations at ECAL (bio-inspired computation), SICB (integrative biology) and other international conferences; won Best Student Paper award, Amer. Soc. of Zoologists.
- Published in peer-reviewed research journals.
- Awarded federal and private research grants, including NIH postdoctoral fellowship.
- Full academic CV available upon request.

#### Recent employment history

2010	Software Engineer, then Senior Software Engineer, then Director of Software Engineering, Kachingle Inc. ( <a href="http://www.kachingle.com/">http://www.kachingle.com/</a> )
2008	Lecturer (microscopy & digital imaging), Merritt College, Oakland, CA
2007-2008	Lecturer (biology), St. Mary's College, Moraga, CA
2004-2006	Biological computer simulation research, Konrad Lorenz Institute, Austria
1997-2003	Biology research, Indiana U., Bloomington

#### Education

- PhD, Molecular and Cell Biology (UC Berkeley).
- BS, Biological Sciences (Stanford University).
- Several programming language courses (Stanford U., Foothill College, Berkeley City College).