

# AUSTEN McDONALD

650.380.4732 | 1514 Hawes Ct.  
austenmc@stanford.edu | Redwood City, CA 94061  
www.austenmcdonald.com

## Objective:

To use my creativity, people skills, and software engineering experience to change the world.

## Education & Skills:

Ph.D. Computer Science [2008 expected]  
Stanford University  
Thesis: Architectures for Transactional Memory  
B.S. Computer Science, with Highest Honors [2003]  
Georgia Institute of Technology

**Fluent**  
C/C++, HTML/CSS  
**Conversant**  
Parallel Programming, SQL,  
Java, Javascript, Compilers, LaTeX  
**Experience with**  
Perl, Python, Flash, AJAX, Ruby

## Experience:

Co-Founder of Talk-a-tu [SUMMER 2007 - ]  
<http://talkatu.org>

Founded a non-profit open-source project to build portable communication software and devices for children with special needs.

Contracted Developer, Tecarta Inc. [SUMMER 2006 - ]  
<http://tecarta.com>

Helped develop web-based, AJAX content management system. Built data-driven online dating service.

Freelance Web and Print Designer [FALL 2005 - ]  
<http://austenmcdonald.com/portfolio>

Designed websites and printed material for the Bay Area Christian Church, an academic conference, the Stanford Pervasive Parallelism Laboratory, my research group, and individuals.

Research Assistant [FALL 2003 - ]  
<http://tcc.stanford.edu>

Developed computer architecture for “transactional memory,” a relatively new parallel programming paradigm. Led an effort to build a C++ parallel system simulator.

## Selected Publications:

Transactional Memory: The Hardware-Software Interface  
Austen McDonald, B. D. Carlstrom, J. W. Chung, C. Cao Minh, H. Chafi, Christos Kozyrakis, Kunle Olukotun.  
Micro's Top Picks, IEEE Micro January/February 2007.

Architectural Semantics for Practical Transactional Memory  
Austen McDonald, J. W. Chung, B. D. Carlstrom, C. Cao Minh, H. Chafi, Christos Kozyrakis, Kunle Olukotun.  
33rd Intl. Symposium on Computer Architecture, ISCA, 2006.

Characterization of TCC on Chip-Multiprocessors  
Austen McDonald, J. W. Chung, H. Chafi, C. Cao Minh, B. D. Carlstrom, L. Hammond, Christos Kozyrakis, Kunle Olukotun.  
14th Intl. Conference on Parallel Architectures and Compilation Techniques, PACT, 2005.

more at <http://www.austenmcdonald.com/research>

References available upon request.