

Education

University of Michigan – School of Information, Ann Arbor, MI

Master of Science in Information, Specialization in Human Computer Interaction (GPA 7.60/8.0). April 2008

2006-2008 School of Information Scholarship

Recipient of Edmond Low Award for Contributions to classmates and Exemplary Leadership. April 2008

Calvin College, Grand Rapids, MI

Bachelor of Arts in Computer Science, Minor in Philosophy (GPA 3.6/4.0). May 2002

Independent Research Topic: *Moral Design: Patterns in Software Design*

Research Interests

- Human-Computer Interaction
- User Experience Research
- Information and Communication Technologies for Development;
- Design

Research Experience

Technology for Emerging Markets Group – Microsoft Research, Bangalore, India

Assistant Researcher (September 2008 - Present)

- Conducted ethnographic field work and designed solutions for the areas of NGOs, education, e-governance and financial inclusion
- Provided user experience research support to the lab's prototyping and development team

Portalis - CHI Student Design Competition. School of Information, University of Michigan, Ann Arbor, MI

Design Researcher (September 2007 – April 2008)

- Employed various HCI methodologies to research and design a system to support aid initiatives for the homeless
- Accepted for presentation in the final round of the ACM Student Design Competition at CHI 2008

John Deere Pathways Project. School of Information, University of Michigan, Ann Arbor, MI

User Experience Researcher (May 2007 – September 2008)

- Conducted contextual inquiry and heuristic evaluations of John Deere's portal site
- Prepared a web strategy report proposing design criteria for implementing a recommender system for improving access to information

Information Scatter Project. School of Information, University of Michigan, Ann Arbor, MI

Research Assistant (May 2007 – September 2008)

- Wrote programs to fetch search engine results and determine key facts from the returned results
- Applied network analysis techniques to analyze information scatter in online search results

altVerito - CHI Student Design Competition. School of Information, University of Michigan, Ann Arbor, MI

Design Researcher (September 2007 – April 2007)

- Researched and designed a computer-based intervention system to promote alternative transportation
- Conducted a week-long journal study with 6 participants located all around the United States; collected qualitative data through interviews, experience testing and review sessions
- Awarded First Prize in the ACM Student Design Competition at CHI 2007

dScribing. School of Information, University of Michigan, Ann Arbor, MI

Researcher and Developer (September 2006 – present)

- Researched, designed and developed a scalable process for clearing intellectual property materials
- Developed a web-based tool for clearing intellectual property in course materials

Computer Science Department. Calvin College, Grand Rapids, MI

Research Assistant (May 1999 – January 2000)

- Researched and developed a Java based task model editor as part of an intelligent information retrieval tool

Professional Experience

Internet Department - Gospel Communications International, Muskegon, MI

Software Engineer (June 2002 - September 2006)

- Designed the architecture and developed BibleGateway.com (www.biblegateway.com), an online Bible search tool
- Researched, designed and developed software solutions to enable the management of client information

Information Technology – Calvin Theological Seminary, Grand Rapids, MI

Database Administrator and Web Developer (May 2001 – May 2002)

- Designed and implemented a database-driven, web based student directory system
- Streamlined student application process through research, design and implementation of a web based solution

Instructional Technology Exploration Center – Calvin College, Grand Rapids, MI

Student Technology Adviser (January 2000 – May 2002)

- Oversaw the education and the effective integration of technology into the curriculum by professors

Campus Store – Calvin College, Grand Rapids, MI

Web Developer and Computer Assistant (May 2000 – May 2001)

- Designed, implemented and maintained the campus store's website
- Purchased, sold and maintained computers and computer accessories for Calvin College students

Publications, Invited Presentations, and Posters

Buyuktur, A; Hutchful, D; Cheng-Lun, L; Nainwal, S; Sant, N. (2008). "Portalis: Using Competitive Online Interactions to Support Aid Initiatives for the Homeless." Paper and poster to be presented at CHI 2008 Conference on Human Factors in Computing Systems, Florence, Italy.

Fons, G; Hutchful, D; Kleymeer, P; Vollmer, T. (2007). "dScribing: Initial Reflections on Student-Centric OCW Publishing." Workshop presentation at OpenCourseWare Consortium Conference, Logan, Utah.

Gukeisen, M; Hutchful, D; Kleymeer, P; Munson, S. (2007). "altVerto: Using interventions and community experiences to promote alternative transportation," Paper and poster presented at CHI 2007 Conference on Human Factors in Computing Systems, San Jose, California. First place, CHI Student Design Competition.

Technical Skills

User Research & Interface Design: Usability testing and analysis, user surveys, user interviews, heuristic evaluation, cognitive walkthrough, vocabulary/metaphor analysis, visual analysis, GTN analysis, literature review, prototyping, storyboarding, task analysis, content inventory, competitive analysis, user personas/scenarios, site maps, wire frames

Web Development & Graphic Design: PHP, (X)HTML, XML, JavaScript, CSS, Blend, Flash, Photoshop, Illustrator, OmniGraffle

Programming: Perl, Python, Ruby, C, C++, C#, Java, Visual Basic, Fortran, Lisp, Smalltalk, SQL

Network Analysis and Modeling: Pajek, GUESS, NetLogo

Operating Systems: Unix/Linux, Microsoft Windows, Macintosh OS X

Additional: Extensive experience with software design and development processes

Professional Activities

- Student Volunteer – CHI 2008 Conference on Human Factors in Computing Systems (April 2008)
- Executive Board Member – Student Organization for Computer-Human Interaction (ACM SIGCHI student chapter), University of Michigan (April 2007 - present)
- Executive Board Member - Community Information Corps, University of Michigan (November 2006 – present)
- Executive Board Member - Abstraction Computer Club, Calvin College (September 2001 – May 2002)
- Treasurer – Boer Bennink residence hall, Calvin College (September 1999 – May 2000)

Professional Affiliations

- Association for Computing Machinery (ACM)
- Association for Computing Machinery Special Interest Group on Computer-Human Interaction (ACM SIGCHI)

Awards and Grants

- School of Information Edmond Low Award for Contribution to classmates and Exemplary Leadership, April 2008
- \$250 – Second Place, Microsoft School of Information Social Computing Prize, 2008
- \$250 – Third Place, School of Information Student Poster Competition, 2008
- \$500 – University of Michigan Rackham Graduate School Travel Grant, September 2007
- First Place – CHI 2007 Student Design Competition, 2007
- Second Place – School of Information Student Poster Competition, 2007
- \$500 – University of Michigan Rackham Graduate School Travel Grant, April 2007
- \$350 – University of Michigan School of Information Conference Grant, 2007
- University of Michigan School of Information Scholarship, 2006-2008
- First prize – Calvin College freshman Computer Science Game Design Challenge, 1998
- Calvin College Mentoring Scholarship, 1998-2002
- Calvin College International Student Scholarship, 1998 - 2002

Language Proficiency

Native fluency in English and Twi; Beginner in French and Hindi