

Katherine A. Goodman

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Education:

Doctor of Philosophy, Technology, Media and Society (projected May 2016)
ATLAS Institute, College of Engineering, University of Colorado, Boulder, CO
(GPA: 3.9/4.0 as of 05/14)

Research interests: perception of fluid physics, transformative experiences in education, higher education, STEM learning

Recent Coursework: Teach & Learn Physics; Computational Cognitive Neuroscience; Big Data Analytics; Seminar in Human Learning; Advanced Special Topics: Game Design; Applied Statistics; Seminar in Design Research; Cognitive Science Practicum

Honors: Chancellor's Award for Excellence in STEM Education (2014)

Master of Professional Writing, May 2002

University of Southern California, Los Angeles CA

Emphasis: Fiction; (GPA: 3.9/4.0)

Thesis: *The Master Key and Other Stories*

Honors: Phi Kappa Phi Award for *Selected Poems*, 2002

Bachelor of Science, May 1997

Valparaiso University, Valparaiso IN

Majors: Mathematics; Languages and Literature; (GPA 3.9/4.0)

Honors Thesis: "In Defense of an Onion: the Life of Active Love as Presented in Dostoevsky's *The Brothers Karamazov*"

Honors: Graduated *summa cum laude*

VU Christ College (honors college) Scholar

VU Alumni Association Distinguished Student Award

Outstanding Service and Leadership Award

Sigma Tau Delta (International English Honor Society)

Mortar Board (National Senior Honor Society)

Alpha Lambda Delta (National Freshman Honor Society)

Lumina Award (College of Arts & Sciences junior year *magna cum laude* standing)

National Merit Scholar; Robert C. Byrd Honors Scholar

Research Experience:

Research Assistant, University of Colorado, Boulder, CO; Nov 2013- present

Member of Engineering Education Research team responsible for:

- Research interviews
- Survey administration
- Data collection and analysis
- Report writing and presentation

Research Assistant, Los Alamos National Laboratory; Los Alamos, NM; Jan -Aug 96

Member of linguistics research team responsible for:

- Writing procedures & revising grant proposals
- Extensive literature research
- Manipulating audio data
- Demonstrating work to National Science Foundation & Department of Energy officials

Mathematics Researcher, Valparaiso University, Valparaiso, IN; May-Aug 95
Awarded grant from Council for Undergraduate Research
Discovered & proved original theorems in Graph Theory

Teaching Experience:

Adjunct Faculty, Community College of Aurora, Aurora, CO; Aug 2009 – Present
Taught Composition I and II to students widely diverse in age, background, and language
Tutored papers online for general student body (2010)
Served on Assessment Committee (2010, 2011)
Upheld firm grading standards
Consistently received higher than average student evaluation feedback

Private Tutor, various locations, dates
One-on-one sessions with students, ranging in ages from seven to nineteen
Subjects tutored include mathematics (arithmetic, Algebra, Geometry, Algebra II, Calculus),
English, writing, writing to ESL students
Consistently improved students' skills, received high marks on all evaluations

Assistant Lecturer, University of Southern California, Los Angeles, CA; Aug 2000 – May 2002
Taught from program curriculum to college freshman as an instructor of record
Created & implemented original lessons & assignments, coordinated with a social issues course
Initiated students into academic writing through the classroom & one-on-one conferences

Undergraduate Teaching Assistant, Christ College, Valparaiso University, Fall 1996
Led weekly discussion of interdisciplinary humanities texts
Graded weekly writing assignments
Researched background material for other teaching assistants
Participated in weekly workshops on pedagogy

Undergraduate Teaching Assistant, Mathematics Dept, Valparaiso University, Aug 96 - May 97
Ran Calculus I computer lab
Assisted students using an equation/graphing program
Assisted with group activities in a problem-solving course

Work & Contract Experience:

Moderator, Mile High Mamas (milehighmamas.com) Denver, CO; Oct 2008-July 2009
Moderated & added discussion on forum associated with a high traffic multi-blog
Filtered product review requests, communicated with product representatives
Assigned products to discussion leaders for review, edited reviews as needed
Wrote round up blogs of posted reviews
Highlighted one "Hot Topic" for the week

Managing Member, Spruced Up LLC, Centennial, CO; Jan 2007-present
Manage real estate transactions for small investment group
Research the residential market on home prices and rental rates
Document all company meetings, keep all financial records
Communicate with clients, accountant, and attorney on behalf of the company

Technical Writer, American Honda Motor Corporation, Torrance, CA; Jan – May 03
Organized & updated existing documentation for Data Center Operations,
Surveyed entire staff to determine what kinds of documentation would be best in the Data Center
Put in place procedures for identifying & replacing incorrect information

Wrote specifications for a Lotus Notes application for maintaining documentation
Tested Lotus Notes application; worked closely with developers to modify application

Interim Office Administrator, Society of Children's Book Writers & Illustrators,

Los Angeles, CA; July – Nov 02
Managed finances, purchasing, & HR functions for small office (6 employees)
Responded to membership correspondence escalated from the Membership Coordinator
Initiated planning of 2003 mid-year conference

Procedural Writer, Los Angeles Community College District, LA, CA June 2002

Wrote and formatted HR bulletins to all faculty at LACCD
Wrote procedures for distribution to community college campuses
Revised internal documents explaining system-wide payroll changes

Technical Writer, Glovia Corporation, El Segundo, CA; Jan 01 - May 01

Edited on line help for business software
Revised training materials for end users & sales staff
Evaluated web site functionality

Project Coordinator, Relate Corporation, Camarillo, CA; July 00 – Aug 00

Managed multi-media projects
Developed original storyboards for computer & web based training
Coordinated contractors' work
Conducted client meetings

Project Coordinator, SoftWorks Corporate Training, LLC, Long Beach, CA; Aug 99 – July 00

Managed multiple instructor-led training projects
Customized courseware, including manuals, quick reference guides, & skills assessments
Compilation & statistical analysis of skills assessments
Developed original storyboards & scripts for Computer Based Training (CBTs)

Technical Writer, J. D. Edwards World Source Company, Denver, CO; Oct 97 - Mar 99.

Member of software development team who documented OneWorld installation & upgrade procedures for AS/400, Windows NT, & UNIX systems (800+ pages of material)
Managed content from programmers to writers
Continually revised product hardware requirements on intranet site
Trained new writers
Participated in software testing

Computer Experience:

Coding Skills: C#, Python, Matlab (with Psychtoolbox)

Software Skills: Desire2Learn, Blackboard; Wordpress; Windows; Microsoft Office (Word, Excel, Outlook, Access, PowerPoint); WordPerfect; Interleaf/RDM; JDE OneWorld; familiar with UNIX, VAX & AS/400 systems and Oracle & SQL Server databases

Hardware Skills: Installation of peripheral cards in PCs, other minor maintenance

Technical Support Consultant, Valparaiso University, Valparaiso, IN; Aug-Dec 95.

Answered questions concerning various software applications
Helped students install telecommunications software
Provided assistance in person & over the phone

Academic Publications:

Comment [KG1]: I sometimes group all these contract positions under one heading

Goodman, Katherine and Bennett, John K. "Modeling the Serial Position Effect: Using the Emergent Neural Network Simulation System" BIOINFORMATICS 2014 Proceedings, March 2014.

Dueringer, Katherine. "Homomorphic Images of Paths and Homomorphism Polynomials" 10th Annual National Conference for Undergraduate Research Proceedings, Spring 1996.

Other Publications:

"Rings" (short story) *Eureka Literary Magazine*, Fall 2003

"Eight Years Old" (poem) *The Cresset*, Spring 2003

"Difficult Doors" and "Sharing a Tree at Night" (poems) *The Lighter*, Fall 1996

"Clear View" *The Lighter*, Spring 1995

"The Water in which I Learn" *The Lighter*, Fall 1994

Scientific Presentations:

"Modeling the Serial Position Effect: Using the Emergent Neural Network Simulation System"
BIOINFORMATICS, March 2014

"Homomorphic Images of Paths and Homomorphism Polynomials"
10th Annual National Conference for Undergraduate Research, Spring 1996
and Fall Meeting of the Mathematics Association of America, 1996

"ADAM: the Advanced Display of Articulated Motion"
Poster Presentation, Spring 1996
Los Alamos National Laboratory Undergraduate Research

Other Presentations:

Poetic Synthesis, Denver, CO (Art & Poetry Showing)
October 2011

*My poem, "Caught", used as springboard by artist Vernoica Taylor for a painting.
Poem read at reception, October 21st, 2011.*

Homecoming Panel: Work Life Balance
Christ College, Valparaiso University, Valparaiso IN
October 2008

Volunteer Experience:

President, Peakview Elementary School PTO, Centennial, CO 2011-2013

President, Jackson Farm II HOA Centennial, CO 2008-2011 (vice president 2006-2008)

Managing Editor, Church Newsletter, Centennial, CO, 2005-2008 (circulation 800)

Organizer, Denver Alumni Reading Group, Christ College, Valparaiso University, 2004-2011

Editor, University Lutheran Chapel Newsletter, Boulder, CO, 1998

Organization Memberships:

American Physical Society (APS) – Student Member 2014-present

International Society for the Learning Sciences Student Member 2014-present

Some work published under name Katherine Dueringer.