CURRICULUM VITAE

NAME: Miller, Nathaniel G. DATE: August 23, 2016

POSITION: Professor
School of Mathematical Sciences
College of Natural and Health Sciences
University of Northern Colorado
Greeley, CO 80639

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Boulder, CO 80302

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EDUCATION:

Professional
Non-Academic

Summer 1994, Summer 1995	Young Scholars' Institute, Trenton, NJ	Computer Science Teacher	Teaching Middle School Students
Summer 1993	Hollowbrook Center, Ewing, NJ	Tutoring Program Developer	Tutoring, Organizing Program

eds., *Beyond Lecture: Resources and Pedagogical Techniques to Improve Student Proof-Writing Across the Curriculum*, MAA Notes Series, Vol. 85.

Journal of Complexity, Volume 22, Issue 2, April 2006, p. 250-274.

Miller, Nathaniel, "CDEG: Computerized Diagrammatic Euclidean Geometry," in Hegarty, Meyer, and Narayanan, eds., *Diagrammatic Representation and Inference*, Springer-Verlag Lecture Notes in Artificial Intelligence, Volume 2317, April 2002, p. 91-93.

Miller, Nathaniel, "Case Analysis in Euclidean Geometry: An Overview," in Anderson, Cheng, and Haarslev, eds., *Theory and Application of Diagrams*, Springer-Verlag Lecture Notes in Artificial Intelligence, Volume 1881, September 2000, p. 490-493.

PROFESSIONAL PRESENTATIONS: (Date, Author(s), Title, Organization, Location)

Invited:

"Multiply-Modified Moore/Miller Methods: The Many Faces of Inquiry-Based Learning in my Classes," invited planary talk, 14th annual Legacy of R.L. Moore conference, Washington, DC, June 2011. Video available online at http://legacyrlmoore.org/Reports/201106/video/miller.html.

Invited Panel Member, MAA Committee on Technology in Mathematics Education Panel Discussion, "Online articles from JOMA to Loci," MAA/AMS Joint Meetings, San Francisco, January 2010.

"Reasoning with Diagrams by Humans and Machines," invited talk, Fourth International Conference, Diagrams 2006, Stanford University, CA, June 2006.

"Discovery Method Geometry Classes for Pre-Service Teachers," invited dinner talk, special session on Geometry and the Moore Method, 8th annual Legacy of R.L. Moore conference, Austin, TX, April 2005.

"Modified Moore Methods in the Teaching of Geometry," Invited talk, Breakout session on Project NExT, 5th annual Legacy of R.L. Moore conference, Austin, TX, March 2002.

"A Diagrammatic Formal System for Euclidean Geometry," Invited Talk, First CSLI Workshop on Visual Reasoning, Center for the Study of Language and Information, Stanford University, May 1999.

Invited Panel member, Panel Discussion/Presentation on Assessment Methods in Undergraduate Geometry courses, NSF/MAA UFE (Undergraduate Faculty Enhancement) Workshop on the Teaching of Undergraduate Geometry Courses, Ithaca, NY, June 2001.

Article referee, *PRIMUS*, 2011.

Tutorial referee, 2 proposed tutorials, Diagrams 2012 conference.

Workshop referee, 4 proposed workshops, Diagrams 2012 conference.

Article referee, *Journal of Logic and Computation*.

Academy of Inquiry-Based Learning mentor to Molly Fenn, North Carolina State University.

Workshop chair, Organizing committee, Diagrams 2012 international conference (held in Canterbury, England, July 2012).

Article referee, *Journal of Inquiry-Based Learning in Mathematics*.

Article referee, *Let's be Logical* book.

Article referee, *Journal of Visual Languages and Computing.*

Article referee (5 articles), Diagrams 2010 conference.

Program committee, Diagrams 2010 conference.

Article referee, 2nd Workshop on Visual Languages and Logic (VLL 2009), Corvallis, Oregon, September 2009.

Program committee, 2nd Workshop on Visual Languages and Logic (VLL 2009), Corvallis, Oregon, September 2009.

Legacy of R.L. Moore mentor to Tanya Rivers and Jeremy Muskat, Western State College of Colorado

Legacy of R.L. Moore mentor to Diana White and Jason Williford, University of Colorado, Denver

Session moderator, 11th annual Legacy of R. L. Moore conference, Austin, Texas, June 2008.

Article referee (five articles), Diagrams 2008 conference.

Program committee, Diagrams 2008 conference.

Project NExT Mentor/Consultant to Angela Hodge, University of North Dakota

Article referee (two articles), Workshop on Visual Languages and Logic (VLL), Coeur D'Alene, Idaho, September 2007.

	position)	
2003–2004	Search Committee (tenure track position)	member; candidate interviewer, Joint Meetings
2002–2006	Math club	Faculty Advisor

University:

2012–present	University grievance committee	member
2007-2010	University grievance committee	member
2007–present	LAC committee	member
2006–2011	AP Calculus Institute	Director
2001 –2005	Swing Dance Club	Faculty Advisor

Honor's Thesis Advisor:

Heidi Williamson

Master's Committees:

Jacob Farmer (chair)
Gordon Causby (chair)
Karl Remsen (chair)
Kritika Chhetri (chair)
Chelsea Willemsen (chair)
Soofia Malik
Heidi Geyer
Kendra Versoi (chair)
Michael Spanneth (chair)
John Buch (chair)
Brandan Madsen (chair)
Amy Poppie (chair)
Lara Tabola
Kristin Ingalls
Julie Thomas
Todd Pfiefer
MacKenzie Metz
Megan Williams
Sara Slagle
Brian Christopher
Jacob Nazeck
Michelle Morgan
Coralle Haley
Sarah Rozner

Kristin King
Jason Conway
Bryce Leonhardt
Brian Rogers
Nathan Wakefield
Cheryl Olson
Shantelle Mulliniks

Ph.D. Committees:

Jeff King
Lee Roberson
Sarah Rozner
Casey Dalton, co-chair.

TEACHING:

Courses Taught at UNC:

2015, Math 543, Modern Geometry
2014, Math 795, Special Topics: Mathematical Modeling
2014, 2015 Math 599, Mathematics ARP seminar
2012, 2014, Math 709, Abstract Algebra
2011, 2016, Math 537, Mathematical Modeling
2010 Math 695, Special Topics: Geometry
2010 Math 437, Mathematical Modeling
2008, 2009 CG 120, Introduction to Python Programming
2007, 2008, Math 283, Geometry and Measurement
2006, Math 391, Introduction to Number Theory
2006–2011 MED 509, AP Calculus Institute
2005, 2007, 2013, Math 540, Topology
2005, 2007, 2009, 2011, 2013, Math 525, Linear Algebra
2004-2009, 2011-2013 Math 342, Modern Geometry II
2004, Math 120, Mathematics for the Liberal Arts
2004, MED 630, Technology in Mathematics Education
2003, 2012, Math 633/733, Geometric Analysis
2003-2004, 2006, Math 387, Mathematics in our Technological World
2002, Math 132, Calculus II
2001-2009, 2011-2016 Math 341, Introduction to Modern Geometry
2002, Math 591, Algebra and Number Theory
2001, Math 233, Calculus III

PROFESSIONAL DEVELOPMENT ACTIVITIES:

Workshops: