

Susan Reynolds

Structures Professor, Professional Engineer, and Licensed Architect

Curriculum Vitae

last revised 12/12/2024

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1.0 Academia

Colorado School of Mines

Golden, Colorado

Academic Ranks

Teaching Professor

Teaching Associate Professor

August 2017 - present August 2012 - August 2017

Awards

Most Inspirational Faculty Member, Job/McAuliffe Honor Fund

Faculty Fellow, Diversity, Equity, Inclusion, and Access

Spring 2023

Nov. 2022 - Nov. 2023

Leadership Appointments

Assistant Department Head, Civil and Environmental Engineering

Director, Thorson First-Year Honors Program

Aug. 2014 - May 2018 July 2018 - May 2020

Study Abroad Assignments

First-year honors students in Costa Rica

Mines in Amsterdam

December 2018 July-August 2023

John Cabot University

Rome, Italy

Visiting Summer Professor

Summers 2015 and 2017-present excluding 2020

Tuskegee University

Tuskegee, Alabama

Assistant Professor

Taylor School of Architecture & Construction Science

Excellence in Research Award, Tuskegee University, Spring 2012

December 2011 – May 2012

2.0 Scholarship

2.1 Educational grants and projects

- VECTOR (Visualizing Engineering Concepts Through Open Resources), \$2.1MM and three-year Department of Education grant, awarded through Colorado State University; I am the Mines PI for the \$600k subcontract.
- Open Educational Resources Four grants to support the creation of OER materials for Mechanics of Materials and Statics: awarded in Fall 2021; Spring 2022; Spring 2023; and Spring 2024 by CDHE (Colorado Department of Higher Education).
- Faculty Mentor, IUSE Grant, an NSF-funded project to support evidence-based teaching, led by PIs Dr. Shane Brown from Oregon State University and Dr. Prateek Shekhar from the New Jersey Institute of Technology, Spring and Fall Semester 2023.
- Technology Fee Grants to support (1) material testing, awarded Spring 2015; (2) SketchUp software licenses, awarded Spring 2018; (3) a STEAM Station for UHSP, awarded in Spring 2019; (4) a Virtual Reality pilot study, awarded in Spring 2021; and (5) SAP and CSI Bridge software licenses, awarded Spring 2023.
- NCARB Grant 2011, National Council of Architectural Registration Boards. Preservation Tenets, Technology, and Stewardship of the Historic Tuskegee University Campus. \$11,700. Awarded 9/2011. Co-PI with Prof. R. Fluker.
- Getty Campus Heritage Grant, Getty Conservation Institute. Educational Component: Research, Assessment, and Planning for a Historic Structure, \$17,000. Awarded in 2006 (to others); I inherited the administration of this grant in 2011.

2.2 Peer-reviewed proceedings papers

- Reynolds, S.M. Seeing Structures: Interactive CAD Models in a Mechanics of Materials Course. Paper presented at 2021 ASEE Annual Conference & Exposition (online due to COVID-19). 7/2021. Full text.
- Reynolds, S. M. (2016, October), Critical Thinking for Open-Ended Engineering Problems Through Written Reflection: A Case Study.

 Paper presented at 2016 ASEE Rocky Mountain Section Conference, Cedar City, Utah. Presented October 2016. Full text.
- Reynolds, S. M., & Tackie, R. N. (2016, June), A Novel Approach to Skeleton-Note Instruction in Large Engineering Courses: Unified and Concise Handouts that are Fun and Colorful. Paper presented at 2016 ASEE Annual Conference & Exposition, New Orleans, Louisiana. https://peer.asee.org/26383
- Reynolds, S. M. (2016, April), A Pedagogical Approach for a Sophomore Mechanics of Materials Course. Extended abstract presented at 2016 MYEE Conference, College Station, Texas. http://myeec.org/papers/s614.html
- Turner, C. J., & Reynolds, S. M. (2014, June), Multidisciplinary Construction Engineering Design Projects. Paper presented at 2014 ASEE Annual Conference, Indianapolis, Indiana. https://peer.asee.org/22856

2.3 Presentations, workshops, and posters

- Neurodiversity@Mines: Building a more inclusive campus. Presentation, Mech. Eng. Dept., Colorado School of Mines, Nov. 2024.
- Strengths-Based Strategies for Accessibility Flash-talk, Teaching Faculty Luncheon, Colorado School of Mines, October 2024.
- Neurodiversity 101 Workshop for SAIL (Student Activities, Involvement, & Leadership), Colorado School of Mines, December, 2023.
- Neurodiversity 101 Workshop for SWE (Society of Women Engineers), Colorado School of Mines, November, 2023.
- Neuroinclusivity. Workshop for ODAC (Orediggers Disability and Activism Club), Colorado School of Mines, November, 2023.
- Neurodiversity 101. Workshop for the Colorado School of Mines Geological Engineering Department, October 2023.
- Accessibility through the Lens of Neuro-Inclusivity. Trefny Center workshop series, Colorado School of Mines, 2023. Buhrer, E., Boyd, A., Elliott, M., and Reynolds, S. M.
- Neurodiversity 101. Workshop for SUMMET leadership, Colorado School of Mines, May 2023.
- Neurodiversity 101. Workshop for the Colorado School of Mines Physics Department, May 2023.
- Neurodiversity@Mines: A Roadmap to a More Neuro-Inclusive Campus. Poster displayed at the 2023 ASEE Rocky Mountain Section Conference, Golden, Colorado. With Dr. E. Buhrer, May 2023.
- Neurodiversity 101: Embracing Neuro-Differences in the Classroom and the Workplace. Workshop for Mines' Celebration of Diversity, Inclusion, and Access, with Dr. E. Buhrer, April 2023.
- Introduction to Neurodiversity, a short presentation to the CEE department, March 2023
- Instructional Development Assignment: Interactive CAD Visualizations Across the Mechanics Curriculum, short presentation to Mines' Teaching Faculty, November 2022.
- The radical idea that learning stems from reading and interacting: a framework for social annotation in the STEM classroom, Capital PKAL (Project Kaleidoscope) Regional Meeting, Association of American Colleges and Universities, 2022.
- Teaching Tips three short presentations to the CEE department: (1) "Seeing Structures: Interactive CAD Models in Mechanics of Materials"; (2) "Pilot study of a social annotation tool in a small graduate class," and (3) "Revise and Resubmit: an alternative formative learning structure for computational engineering courses"). Fall Semester 2021.
- Facilitating 'Hands-On' Learning in a Browser: Project-Based Learning in Online and Remote STEM Courses, Massachusetts PKAL (Project Kaleidoscope) Regional Network, Association of American Colleges and Universities, January 2021.
- An Experimental Lattice Structure for Collaborative and Interdisciplinary Teaching Teams, abstract accepted by the Western Regional Honors Conference (the 3/2020 conference was cancelled due to the COVID pandemic).

Place as Text: GPS-Based, Dynamic, Geophysical Mapping, abstract accepted by the Western Regional Honors Conference (the 3/2020 conference was cancelled due to the COVID pandemic).

Takeaways from the Academic Management Institute, panel discussion, Colorado School of Mines, 4/2019.

AMI Project: Strategic Plan for the Thorson First-Year Honors Program, AMI Workshop, 3/2019, Pueblo, Colorado.

An Integrated, Collaborative Engineering and Humanities Teaching Model for First Year Students, workshop at the ASEE Regional Conference, Boulder, CO. Authored and presented by Alina Handorean, Mirna Mattjik, and Susan Reynolds, 3/2018.

Reversibility in Historic Preservation and its Application to Sustainable Design Practices in New Construction. Invited panel discussion, 2017 ASCE Structures Congress, Denver, Colorado.

One Size Doesn't Fit All: A Contrast Between the Course Design of Sophomore and Graduate Courses, Pedagogy Seminar Series, Colorado School of Mines, 11/2016.

Preservation Challenges of African American Sites with Ties to Tuskegee: Three Case Studies, Black History Month lecture series, Tuskegee University, 2/2012.

Common Sense Revit Solutions, AECOM Structural Summit, Virginia Beach, Virginia, 9/2008.

Revit Experiences and Lessons Learned, AECOM Architectural Atelier, Charlotte, North Carolina, with S. Oaks and A. McCreary, 4/2008.

An Introduction to Revit, AECOM office, all departments, Washington, DC, 11/2007.

An Introduction to Revit Structure, AECOM office, Structural Department, Washington, DC, 7/2007.

Conservation Engineering: International Trends, RSA office, Washington, DC, 11/2006.

A Structural Engineer's Perspective on Conservation, ICCROM, Rome, Italy, 8/2006.

UVA-ART Building - Seismic Design, RSA office, Washington, DC, 3/2006.

A Dialogue of Projects as the Robert Silman Fellow, 2/18/2005 in Washington, DC and 2/11/2005 in New York, NY.

Preservation Engineering Trends: the U.S. approach in the context of international practice, US/ICOMOS newsletter, 11/2006.

How to Inspect a National Trust Historic Site, internal National Trust publication, 2005.

3.0 Teaching

3.1 Courses taught (summary table)

		Institution ¹	Created by:	Project- Based	Flipped Classroom	Graphics Instruction	Reading- Intensive	Writing- Intensive
Structures and	Mechanics Courses							
CEEN 298	Statics + Mechanics of Materials	Mines	S. Reynolds	х	Х			
CEEN 241	Statics	Mines, JCU	others		Х			
CEEN 311	Mechanics of Materials	Mines, JCU	others					
CEEN 314	Structural Theory	Mines	others					
CEEN 530	Advanced Structural Analysis	Mines	others	Х	X			
CEEN 544	Structural Preservation	Mines	S. Reynolds	Х	Х	Х	Х	х
ARCH 343	Structures I	Tuskegee	others					
ARCH 344	Structures II	Tuskegee	others					
ARCH 443	Structures III	Tuskegee	others					
Project-Based,	oject-Based, Open-Ended, and Interdisciplinary Design Courses							
HNRS 105	IDEAS I (First-Year Honors)	Mines	S. Reynolds with	X		х	X	Х
HNRS 115	IDEAS II (First-Year Honors)	Mines	five others ²	Х		Х	Х	Х
EGGN 491	Senior Design I	Mines	others	Х				Х
EGGN 492	Senior Design II	Mines	others	Х				Х
Construction C	ourses							
CEEN 360	Intro. to Construction Eng.	Mines	S. Reynolds	Х	Х			
CSMT 435	Soils and Foundations	Tuskegee	others					
CSMT 342	Construction Methods	Tuskegee	others					
CSMT 352	Construction Safety	Tuskegee	others					
Miscellaneous								
CEEN 398	The Brooklyn Bridge	Mines	S. Reynolds				Х	Х
ARCH 364	Historic Preservation I	Tuskegee	S. Reynolds	Х			Х	Х

¹ Mines = Colorado School of Mines; JCU = John Cabot University; Tuskegee = Tuskegee University

² Creative collaboration between Professors Burgess, Handorean, Hitt, Lefton, Mattjik, and Reynolds

3.2 Courses taught (chronological list)

- Spring 2011, Tuskegee University
 - Structures II x1
 - Soils and Foundations x1
 - Construction Safety x1
- Fall 2011, Tuskegee University
 - Structures I x1
 - Structures III x1
 - Historic Preservation I x1
- Spring 2012. Tuskegee University
 - Structures II x1
 - Construction Methods x1
 - Soils and Foundations x1
- Fall 2012, Colorado School of Mines
 - Mechanics of Materials x2
 - Senior Design I advised 4 teams
- Spring 2013, Colorado School of Mines
 - Mechanics of Materials x1
 - o Senior Design II advised 4 teams
 - Structural Preservation x1
- Fall 2013, Colorado School of Mines
 - Senior Design I advised 1 team
 - Senior Design I and II course coordination
 - Mechanics of Materials x1
- Spring 2014, Colorado School of Mines
 - o Senior Design II advised 1 team
 - Senior Design I and II course coordination
 - Mechanics of Materials x1
 - Independent Study: Building Information Modeling
- Fall 2014, Colorado School of Mines
 - Mechanics of Materials x2 + course coordination
 - Structural Theory x1
- Spring 2015, Colorado School of Mines
 - Mechanics of Materials x2 + course coordination
 - Independent Study: Building Information Modeling x1
- Summer 2015, John Cabot University
 - Statics x1
- Fall 2015, Colorado School of Mines
 - 2/3 of Mechanics of Materials x3

- Structural Preservation x1
- Spring 2016 (on leave)
- Fall 2016, Colorado School of Mines
 - o IDEAS I (First-Year Honors I) x1
 - o IDEAS hand graphics (recitations) x4
 - Mechanics of Materials x2
- Spring 2017, Colorado School of Mines
 - o IDEAS II (First-Year Honors II) x1
 - IDEAS CAD graphics (recitations) x3
 - Introduction to Construction Engineering x1
- Summer 2017, John Cabot University
 - Statics x1
- Fall 2017, Colorado School of Mines
 - IDEAS I (First-Year Honors I) x1
 - IDEAS hand graphics (recitations) x4
 - Mechanics of Materials x1
- Spring 2018, Colorado School of Mines
 - IDEAS II (First-Year Honors II) x1
 - o IDEAS CAD graphics (recitations) x3
 - Introduction to Construction Engineering x1
- Summer 2018, John Cabot University
 - Statics x1
- Fall 2018, Colorado School of Mines
 - IDEAS (First Year Honors) I x4 + course coordination
 - IDEAS (First Year Honors) I x6: hand graphics (recitations)
- Spring 2019, Colorado School of Mines
 - IDEAS (First-Year Honors) II x4 + course coordination
 - IDEAS (First-Year Honors) II, CAD graphics (recitations) x5
- Summer 2019, Colorado School of Mines
 - Statics
- Fall 2019 (on leave)
- Spring 2020, Colorado School of Mines
 - The Triumphs and Failures of the Brooklyn Bridge x1
- Fall 2020. Colorado School of Mines
 - Mechanics of Materials x2
 - Introduction to Construction Engineering x1

- Spring 2021, Colorado School of Mines
 - Mechanics of Materials x2 second time taught remotely
 - Introduction to Construction
 Engineering x1
- Summer I 2021, John Cabot University
 - Statics x1
 - Mechanics of Materials x1
- Summer II 2021, Colorado School of Mines
 - Mechanics of Materials x1
- Fall 2021, Colorado School of Mines
 - Mechanics of Materials x2
 - Structural Preservation x1
- Spring 2022 Instructional Development Assignment (release from teaching duties)
- Summer I 2022, John Cabot University
 - Statics x1
- Fall 2022, Colorado School of Mines
 - Advanced Structural Analysis x1
 - Mechanics of Materials x2
- Spring 2023, Colorado School of Mines
 - Mechanics of Materials x3
- Summer 2023
 - Statics x1 (Summer I at JCU)
 - Mechanics of Materials x1 (Summer I at JCU)
 - Statics x1 (Summer II, "Mines in Amsterdam")
- Fall 2023, Colorado School of Mines
 - Mechanics of Materials x2
 - Structural Preservation
- Spring 2024, Colorado School of Mines
 - Mechanics of Materials x2
 - Advanced Structural Analysis
- Summer 2024, John Cabot University
 - Statics x1 (JCU)
 - MechMat x1 (JCU)
- Fall 2024, Colorado School of Mines
 - Statics+MechMat combined course (6.0 credit hours)
- Spring 2025, Colorado School of Mines
 - MechMat x2

3.3 Pedagogical expertise

Traditional Lecture
Flipped classrooms
Active learning
Skeleton notes
Revise and resubmit

Design charrettes
Cooperative learning
Project-based learning
Social annotation
Authentic assessment

Hands-on learning
Infographic learning
Teaching through case studies
Inquiry-based learning
Neurodiverse learning styles

3.4 Student feedback

"Susan Reynolds is by far the best instructor I've ever had the pleasure to learn from, her enthusiasm is infectious and she has perfected the ability to enable students to learn difficult material. I am typically an average to slightly above average student grade-wise but I have excelled in this class and I want to give Susan all the credit available for that. The thirst for knowledge and the skills to learn that I've gained from this course are going to be what lead me through this school. Don't ever change, Susan!!"

"She gives amazing notes that are very organized and easy to follow. I think the notes and lecture style have really contributed to my success and learning in the class. She is interesting, funny, and makes lectures enjoyable. Her balance between talking, having physical objects that we can look at, and her asking us questions for us to try to answer keeps my attention. It is clear that she is passionate about helping us learn the material, and about her students' success both in this class and after. I also like the recitations, because it helps to solidify the material we are learning, and I am able to try problems and work with my peers. Her videos are also incredibly helpful. I absolutely love this class!"

"The organization of the course, from lectures to exam review to homework assignments, was incredible and extremely beneficial in learning the material. As an engineering physics major, I was completely blown away by this. Nothing that I've experienced in the Physics department thus far, especially including 300- level classes, even approaches anything as good as the teaching in this course. If you can share some of what you do with those guys then it would be helpful to other physics majors in so many ways. I enjoyed the way the material was presented in lectures in addition to the recitations which helped to reinforce some of the key ideas and methods."

"Outside of the worksheet and set up of the class, Professor Reynolds is genuinely interested in the subject and in engineering in general; It's apparent in her lectures. She's also genuinely invested in getting the students to understand the material. She always answers questions, and never makes one feel unable to speak up. She is the kind of person who should have authority on how the school approaches teaching and hiring. It's all too easy for professors to take advantage of the fact that students should do some level of self study to justify not teaching at all. Susan is the opposite of that. Of course she wants students to be invested and work hard to grasp the concepts, but there is no question that she does her part and gives the students what they need to succeed."

"Susan is by far the best professor I have had at Mines. Her love for teaching and this course is evident with her positive attitude in every lecture that cultivates an environment where I want to learn more and perform my best. She excels in teaching difficult material in a way that I can easily understand. She's the type of professor that I will remember years after graduating as someone who has truly mastered the art of teaching.

4.0 Open Educational Resources

4.1 Open access textbooks

My open access textbooks are posted at <u>Seeing Structures</u>, licensed as open-educational resources, and catalogued in OER repositories such as <u>OER Commons</u> and <u>MERLOT</u>.

Statics: A student-centered approach

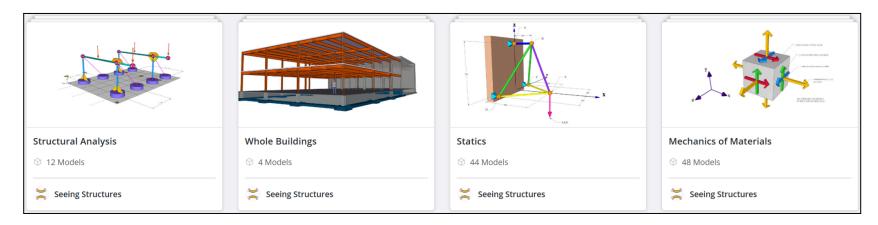
1st ed. Reynolds, Susan. Creative Commons license CC BY-NC-SA 4.0.

Mechanics of Materials: an online learning platform

3rd ed. Reynolds, Susan. Creative Commons license CC BY-NC-SA 4.0.

4.2 Interactive visualizations

My interactive visualizations are posted at https://3dwarehouse.sketchup.com/by/SeeingStructures.



4.3 Video tutorials

My video tutorials are posted at https://www.youtube.com/c/SeeingStructures.

4.4 Open access images

My open access images are posted at https://commons.wikimedia.org/wiki/Special:Contributions/SeeingStructures.

5.0 Professional

5.1 Licensure

Professional Engineer State of Alabama 2011 – present Professional Engineer Commonwealth of Virginia 2010 – present Registered Architect District of Columbia 2008 – present LEED Accredited Professional U.S. Green Building Council 2008 – 2013

5.2 Employers

AECOM Engineer (Associate)

Washington, DC and Arlington, VA 2007-2010

Responsibilities: structural design and documentation. Blend of new construction and historic preservation.

Robert Silman Associates Structural Engineer

Washington, DC 2004-2007

<u>Responsibilities</u>: structural design and documentation. Blend of new construction and historic preservation. Included a 6-month period at **The National Trust**, also in Washington, DC as the Robert Silman Fellow for Preservation Engineering.

ICCROM (International Center for the Conservation and Restoration of Cultural Property)

Rome, Italy Summer 2006

Responsibilities: Preliminary course design for "Structural Issues Related to Conservation of the Built Heritage." The 3-month appointment was sponsored by the ICOMOS (International Council on Monuments and Sites) International Exchange Program.

tvsdesign Intern Architect

Chicago, IL 2000-2002

Responsibilities: Drafting construction documents, performing construction administration, multidisciplinary coordination.

<u>Miscellaneous</u>. Architectural internships at Olsen and Associates, Champaign, Illinois (Summer 2002); Architects Equities, Champaign, Illinois (Summer 1999); and ArchitectureWorks, Birmingham, Alabama (Summer 1998). Drafting and model-building.

5.3 Projects

<u>The Varner House</u>, Tuskegee, AL, for Tuskegee University (owner). Pro-bono condition assessment of an antebellum mansion and a rehabilitation feasibility analysis. <u>Author (pro bono)</u>, 2011.

Mercy Clinic Expansion, Janesville, WI, for Ellerbe Becket (architect). Structural design of a multi-story steel-framed health care facility. Project structural engineer, AECOM, 2010.

Office of Chief Army Reserves, Ft. Belvoir, VA, for US Army Corps of Engineers. Fast-track design of structural steel, 2-story office building. Project awarded to others). Project structural engineer, AECOM, 2010.

<u>Second Avenue Subway</u>, New York, NY, for the NY Metropolitan Transit Authority. Condition assessments of 180 buildings along the route of the tunnel boring machine. <u>Task leader</u>, AECOM, 2010.

<u>Big Meadows Lodge</u>, Luray, VA, for the National Park Service. Condition assessment of a 1920s reinforced concrete and masonry building. <u>Project structural engineer</u>, AECOM, 2009.

<u>National Museum of Natural History</u>, Washington, DC (Smithsonian Institution). Structural analysis to upgrade conventional storage to high-density storage. Project structural engineer, AECOM, 2009.

National Museum of Health and Medicine, Silver Spring, MD, for the Army Corps of Engineers. Pre-design for a one-story museum. Project structural engineer, AECOM, 2009.

<u>Defense Media Activities Building and Adjudication Activities Building,</u> Ft. Meade, MD, for the Army Corps of Engineers. <u>BIM Implementation Lead</u>. AECOM. 2009.

Navy Medical Biological Defense Research Laboratory (NMBDRL), Ft. Detrick, MD, for the Army Corps. Pre-design of research laboratory with stringent vibration criteria. Project structural engineer, AECOM, 2009.

<u>Flight Simulator</u> (Building 206), Dover, DE, for Dover Air Force Base. Engineering for the building renovation, including strengthening for antiterrorism (blast loads). <u>Project structural engineer</u>, AECOM, 2009.

<u>Squadron Operations Building</u>, <u>Fire Station</u>, and <u>Base Supply Building</u>, Martinsville, WV, for the West Virginia Air National Guard. Construction administration. <u>Project structural engineer</u>, AECOM, 2009.

National Park Service Headquarters and United States Park Police Headquarters, Washington, DC, for the Park Service. Preliminary design for four multi-story buildings. Project structural engineer, AECOM, 2008.

<u>The Pentagon</u>, Arlington, VA, for Washington Headquarter Services. Structural analysis of the original 1940s reinforced concrete structure. <u>Project structural engineer</u>, AECOM, 2008.

Regional Correctional Facility, Ft. Leavenworth, KS, for the Army Corps. Project structural engineer for four new buildings and antiterrorism (blast) lead for the entire project, AECOM, 2007.

The National Gallery of Art (East Building), Washington, DC, for the National Gallery. High-profile façade investigation of exterior stone cladding panels. Project structural engineer, RSA, 2006.

<u>The Farnsworth House</u>, Plano, IL, for the National Trust. Condition assessment of Mies van der Rohe's steel masterpiece (corrosion, oxide jacking, and moisture migration). <u>Author</u>, The National Trust, 2005.

Advanced Research and Technology Building, Charlottesville, VA, for Perkins + Will (architect). Owner: The University of Virginia. New 750,000 SF steel-framed research laboratory with stringent vibration criteria. Supporting structural engineer, RSA, 2006.

The National Portrait Gallery (Old Patent Office Building), Washington, DC, for Beyer Blinder Belle (architect). Owner: The Smithsonian Institution. Blast analysis and upgrade, historic unreinforced 4-story masonry bearing walls. Project structural engineer, RSA, 2004.

McCormick Place West Expansion, Chicago, IL, for the Metropolitan Pier and Exposition Authority. Architectural design of a 2.5 million SF addition featuring 100 foot tall curtain walls. Supporting architectural designer and liaison to structural consultant, tvsdesign, 2002.

<u>Washington Convention Center</u>, Washington, DC, Construction administration and architectural design for the new 2.3 million SF convention center. <u>Supporting architectural designer</u>, tysdesign, 2001.

<u>Hyatt Regency Hotel</u>, Orlando, FL. Preliminary design of a new 34-story high rise hotel (design not chosen for construction). <u>Supporting</u> <u>architectural designer</u>, tvsdesign, 2001.

6.0 Education

6.1 Formal education

2004 M. S. Civil Engineering (Structural) University of Illinois GPA: 3.79 / 4.00

Graduate Teaching Assistant

Graduate Research Assistant

MS Thesis: Documentation and Modeling of the Thomas M. Siebel Center for Computer Science: A Framework for the Development of a Living Laboratory for Structural Health Monitoring

2000 B. Architecture Auburn University GPA: 3.64 / 4.00

B.Arch Thesis: A New Music Education and Performance Facility for

Auburn University

2004 B. A. Spanish Auburn University GPA: 4.00 / 4.00

6.2 Continuing education

The Steel Conference	San Antonio, TX	Spring 2024
Teaching With Heart Cohort	online	Fall 2023
American Society for Engineering Education - Regional Conference	Golden, CO	Spring 2023
Engineering Learning (EL) Short Course (Trefny Center)	online	11/2021
American Society for Engineering Education - National Conference	online	7/2021
Engineering and Facilitating Online Learning (EFOL) Short Course	online	3/2021
Open Educational Resources (OER) Certificate (Lakes Library)	online	2/2021
Association of American Colleges and Universities - STEM Ed	online	1/2021
Academic Management Institute Workshop Series	various locations	AY18-19
National Collegiate Honors Council - Annual Conference	Boston, MA	11/2018
American Society for Engineering Education - Regional Conference	Boulder, CO	3/2018
ASCE Structures Congress	Denver, CO	4/2017
National Collegiate Honors Council - Annual Conference	Atlanta, GA	11/2017

American Society for Engineering Education - Regional Conference	Cedar City, UT	10/2016
American Society for Engineering Education - National Conference	New Orleans, LA	6/2016
The Middle-Years Engineering Experience	College Station, TX	4/2016
Project Kaleidoscope Summer Leadership Institute	Crestone, CO	7/2015
ASCE Department Head Conference	Blacksburg, VA	5/2015
ABET Symposium	Atlanta, GA	4/2015
American Society for Engineering Education - National Conference	Indianapolis, IN	6/2014
ASCE Regional Conference	Ft. Collins, CO	4/2014
ASCE Regional Conference	Logan, UT	4/2013
Center for Sustainable Engineering Workshop	Atlanta, GA	6/2013
Engineering By Doing: Equity, Sustainability, and Hands-On Learning	Golden, CO	5/2013
The Architecture and Engineering of Sustainable Buildings	Chicago, IL	7/2012
LEED Green Associate Test Preparation	Tuskegee, AL	5/2012
Robert R. Taylor Symposium	Tuskegee, AL	4/2011
Progressive Collapse Seminar	Richmond, VA	7/2008
Revit Advanced Training	Washington, DC	4/2008
Design for Shallow Foundations	Richmond, VA	6/2008
Revit Basic Training	Washington, DC	11/2007
APT Building Codes and Historic Rehabilitation	Chicago, IL	10/2006
Autodesk University	Orlando, FL	11/2005
Revit Structure Seminar	Baltimore, MD	7/2005
National Trust Annual Conference	Louisville, KY	9/2004
International Masonry Institute	Annapolis, MD	8/2004

7.0 Service

AY24-25 (Colorado School of Mines)	CEE departmental service	Undergraduate Curriculum Committee Space Committee
	Campus-wide service	Academic Standards Committees Digital Accessibility Committee
	Miscellaneous	Faculty adviser of Infinity Club Facilitator of the MNAN (Mines Neurodiversity Ally Network)
AY23-24 (Colorado School of Mines)	CEE departmental service	Faculty Awards Committee Social Committee
	Campus-wide service	Academic Standards Committee Digital Accessibility Committee
	Miscellaneous	Faculty Search Committee, Economics and Business Dept. Faculty adviser of Infinity Club Facilitator of the MNAN (Mines Neurodiversity Ally Network)
AY22-23 (Colorado School of Mines)	CEE departmental service	Social Committee Faculty Awards Committee
	Campus-wide service	Academic Standards Committee Ad Hoc Senate Committee on Bylaws and Rules Ad Hoc Senate Committee on Contracts VDI (Virtual Desktop Infrastructure) Committee
AY20-21 (Colorado School of Mines)	CEE departmental service	Social Committee Faculty Awards Committee Construction Engineering Program Feasibility Committee
AY21-22 (Colorado School of Mines)	CEE departmental service	Faculty Awards Committee Social Committee
	Campus-wide service	Faculty Oversight Committee of Sports and Athletics Educational Component of Mines Park Committee
	Miscellaneous	Proposed/received a Diversity, Inclusion, and Access (DIA) mini-grant
AY19-20 (Colorado School of Mines)	Campus-wide service	Core Curriculum Committee Readmissions Committee
AY18-19 (Colorado School of Mines)	Campus-wide service	Core Curriculum Committee Readmissions Committee
	UHSP committees First-Year Honors	Chair, Search Committee for Assistant Director of First-Year Honors Redesigned the application for the First-Year Honors Program Designed and launched the website for the First-Year Honors Program Represented First-Year Honors at Discover Mines and Preview Mines Wrote a Strategic Plan for First-Year Honors

AY17-18 (Colorado School of Mines)	CEE departmental service Campus-wide service Miscellaneous	Chair, CEE Curriculum Committee Scheduling lead Readmissions Committee Architectural Review Committee Wrote the ABET Self-Study report for the B.S. Civil Engineering Wrote the ABET Self-Study report for the B.S. Environmental Engineering Wrote a CEE Policies and Procedures Manual Wrote a CEE workload policy
AY16-17 (Colorado School of Mines)	CEE departmental service	CEE scheduling lead Led development of four new CEE minors and ASIs
AY15-16 (Colorado School of Mines)	CEE departmental service	CEE scheduling lead Wrote two UG Assessment Reports (Civil Eng. and Env. Eng. programs) Wrote a Graduate Assessment Report (for all CEE grad programs) Represented CEE at Discover Mines and Preview Mines Co-created promotional materials for the Civil Engineering program Wrote: FE Exam Results, 2005-2015, Civil & Env. Majors Designed and deployed the CEE Assessment Form to faculty Created a four-year teaching schedule projection for CEE Designed and deployed a graduate student exit survey Planned and led the AY15-16 CEE Constituency Advisory Council mtg.
AY14-15 (Colorado School of Mines)	CEE departmental service	Department lead, Undergraduate Curriculum Development Wrote two UG Assessment Reports (Civil Eng. and Env. Eng. programs) Wrote a Graduate Assessment Report (for all CEE grad programs) Designed, created, and deployed the CEE Department intranet site Designed and deployed surveys to students and alumni Wrote Summary of CEE Constituency Advisory Council Interviews Created two one-hour curricular workshops for CEE faculty Represented CEE at Preview Mines Planned and led the CEE Constituency Advisory Council meeting Redesigned curricular flowcharts for the Civil and Env. Eng. degrees
AY13-14 (Colorado School of Mines)	CEE departmental service Miscellaneous	Represented CEE at Preview Mines and Discover Mines Chair, CEE Senior Design ad hoc committee Adviser, Concrete Canoe Team
AY12-13 (Colorado School of Mines)	CEE departmental service Miscellaneous	Search Committee, Sustainable Structures Faculty Advised the AY12-13 Mines Concrete Canoe Team Planned and organized Mines' ASCE "Springfest"
AY11-12 (Tuskegee University)		Juror, Architecture & Engineering of Sustainable Buildings Competition Design and Construction of Art Installation / Signage for TSACS Wrote a pro-bono Structural Condition Assessment of the Varner House

Varner House Restoration Committee, member, Tuskegee University TSACS Curriculum Committee, member IT Committee, chair, TSACS Maintained TSACS website

8.0 Graphic summary

