DANIEL D. JENSEN, Ph.D.
Westmont College, 955 La Paz Rd., Santa Barbara, CA 93108

Cell (719) 237-3079, email: djensen@westmont.edu, ddjensen7771@gmail.com

I. EDUCATION

Ph.D. in Aerospace Engineering, Univ. of Colorado, Boulder, 1992.
(Emphasis in computational structural design & analysis)
M.S. in Applied Mechanics, Univ. of Colorado, Boulder, 1987.
(Emphasis in advanced solid mechanics)
B.S. in Mechanical Engineering- Business Emphasis, Univ. of Colorado, Boulder, 1984.

II. EXPERIENCE

Allder Chair Professor of Engineering, Director of the Engineering Program,
Westmont College, Santa Barbara, CA **2021 – present**
Lead creation of new engineering program for Westmont College

Scholar in Residence, University of Colorado, Denver **2019 – May 2021**
Development and instruction: Engineering Design program for Univ. of Colo, Denver

Owner- Creo Consulting Corp, Colo. Springs, CO **1999 - present**
Teach "Design Thinking, Innovation & Creativity", develop educational enhancements, design and analysis work for mechanical applications, mentor/lead design teams, product liability/patent and automotive expert witness work.

Senior Fellow, Singapore Univ. Tech. & Design/MIT Intl. Design Center **2015 - present**
Teach/Research Design Thinking & Innovation in Product/Systems/Services Design

Asst./Assoc./Full Professor – Engineering Mechanics, US Air Force Academy, CO **1997- 2018**
Teach in areas of design, solid mechanics, instrumentation and computational methods. Conduct research in pedagogical advances in engineering education & design methods to enhance innovation.

Asst. Professor of Mech. Engineering., Univ. of the Pacific, Stockton, CA **1993 - 1997**
Conducted research in pedagogical advances in engineering education & computational analysis techniques while teaching M.E. courses.

Eng. Consultant & Professor, Lawrence Berkeley Natl. Lab., Berkeley, CA **1995 - 1997**
Taught courses on computer-based analysis. Consulted in computer use for advanced analysis including finite element analysis and use of high performance super computers.

NASA Post Doctoral Researcher, Center for Space Structures, UC Boulder, **1992 - 1993**
Research in static and dynamic advanced computational design & simulation techniques.

Research Assistant, Aero. Eng. Dept., Univ. of CO **1988 - 1992**
Research acoustic structural modeling & shell finite element formulation with increased stress accuracy. Work was funded by Naval Research Laboratories.

Research Associate, Lockheed - Palo Alto Labs, Palo Alto, CA **10/89 - 3/90**
Implemented and tested new innovative computational simulation and design software jointly used by Lockheed-Martin and NASA.

Design Engineer, Texas Instruments, Lubbock TX **Summer 1983**

Performed design and analysis of electronics packaging. Worked on suppression of radio frequency interference through structural mechanics enhanced grounding techniques.

General Qualifications

I am currently the lead professor for development and implementation of the new engineering program at Westmont College. This entails development of curriculum, hiring faculty, fund raising, creation of a new engineering facility, lab development and ABET work. Previously, at the Air Force Academy, I developed and supervised a broad range of curriculum. I developed the engineering design program and raised millions of dollars of funding for design projects. I developed and implemented many mechanical and general engineering courses. I have recruited and mentored dozens of faculty members that have taught for me in these courses. I developed and supervised labs to support these programs. I have worked on numerous ABET accreditation efforts both at the Air Force Academy and other universities.

I have significant experience in engineering design and systems engineering. I retired from the US Air Force Academy after 21 years leading the Mechanical/Systems Design program. I have worked on the design of hundreds of products, processes and services and have taught thousands of students and industrial designers how to design, build and test products. I own a consulting company that regularly consults in all aspects of engineering and systems design specializing in methods to use "Design Thinking" to enhance innovation. I have been a "Scholar in Residence" at the Univ. of Colorado in Denver. I am a Fellow at the International Design Center which is the largest design research center in the world. This center is located at both the Singapore University of Technology and Design and MIT. I regularly teach courses in "Innovation in Product/Systems Design" at the SUTD/MIT Academy and in other contexts. I have trained hundreds of design teams in "Design Thinking & Innovation in Design of Products, Processes and Services". I have over 150 peer-reviewed publications (conferences, journals, books) and have grants for approximately $10 million in research/consulting/endowment funding. Note that much of this funding has been done in collaboration with other people or institutions. I have been asked to give invited presentations over 80 times and have overseen the creation of dozens of patents.

Example Research, Design Project and Consulting Clients

US Air Force Research Lab, Northrup Grumman Corp., Dept. of Energy, Lockheed Missiles and Space, Baxter Medical Devices, Singtel (Singaporean communications company), Autodesk, Amazon, Phillips, NASA (through Made in Space), Defense Advanced Research Projects Agency (DARPA), Bonnett, Fairbourn, Friedman & Balint, PC, Intervarsity Christian Fellowship, US Army Research & Development Center, Defense Threat Reduction Agency, ST Electronics, Bank of Singapore, Air Force Civil Engineering Center, US Office of the Secretary of Defense, Singaporean Ministry of Defense (many different Min. Def. agencies), US Joint Special Operations Command, Advanced Research Associates, National Science Foundation (numerous funded projects), Force Medical Evaluation Support, Microsoft, Lawrence Berkeley National Labs., MSC Corp., Air Force Office of Scientific Research, Wiley Publishing, National Institute of Standards and Technology (NIST), Matrix Design Group

III. PUBLICATIONS & PRESENTATIONS

III.1 Refereed Conference Papers

Park, K.C., Jensen, D.D., "A Systematic Determination of Lumped and Improved Consistent Mass Matrices for Vibration Analysis," *Proceeding of the AIAA Structures, Dynamics and Materials Conference*, Mobile, AL, April, 1989.

Jensen, D.D., Park, K.C., "Transverse Shear Augmented ANS Shell Elements," *Proceedings of the First U.S. National Congress on Computational Mechanics*, Chicago, IL, July, 1991.

Jensen, D.D., Park, K.C., "ANS Shell Elements with Improved Transverse Shear Accuracy," *Proceedings of the AIAA Structures, Dynamics and Materials Conference*, Dallas, TX, April, 1992.

Jensen, D.D., "Using MSC\PATRAN for Pre- and Postprocessing for Specialized FEM Codes that Are Not in the Standard MSC/PATRAN Library*," Proceedings of the MSC World Conference*, Newport Beach, CA June, 1996.

Jensen, D.D., Murphy, M.D., Wood, K.L., "Evaluation and Refinement of a Restructured Introduction to Engineering Design Course Using Student Surveys and MBTI Data," *Proceedings of the ASEE Annual Conference*, Seattle WA, June, 1998.

Otto, K., Wood, K.L., Murphy, M.D., Jensen, D.D., "Building Better Mousetrap Builders: Courses to Incrementally and Systematically Teach Design," *Proceedings of the ASEE Annual Conference,* Seattle WA, June, 1998.

Borchert , R., Jensen, D., Yates, D. , "Hands-on and Visualization Modules for Enhancement of Learning in Mechanics: Development and Assessment in the Context of Myers Briggs Types and VARK Learning Styles," *Proceedings of ASEE Annual Conferenc*e, Charlotte, NC, June, 1999.

Jensen, D., Bowe, M., "Hands-on Experiences to Enhance Learning of Design: Effectiveness in a Reverse Engineering / Redesign Context When Correlated with MBTI and VARK Types," *Proceedings of ASEE Annual Conference*, Charlotte, NC, June, 1999.

Murphy, M., Jensen, D., "Integrating CAD into an Already Packed Curriculum: Is Another Class Necessary?," *Proceedings of ASEE Annual Conference*, Charlotte, NC, June, 1999.

Jensen, D., Feland, J., Bowe, M., Self, B., "A 6-Hats Based Team Formation Strategy: Development and Comparison with an MBTI Based Approach," Proceedings *of the ASEE Annual Conference*, St. Louis, June 2000.

Bowe, M., Jensen, D., Feland, J., Self, B., "When Multimedia *Doesn't* Work: An Assessment of Visualization Modules for Learning Enhancement in Mechanics," *Proceedings of the ASEE Annual Conference, St Louis, June 2000.*

Jensen, D., Greer, M., Wood, K., Nowack, M., "Force Flow Analysis: Opportunities for Creative Component Combination," *Proceedings of the ASME Annual Conference,* Orlando, FL, Nov., 2000.

Rhymer, D., Jensen, D., "An Assessment of Visualization Modules for Learning Enhancement in Mechanics," *Proceedings of the ASEE Annual Conference*, Albuquerque NM, June 2001.

Dennis, S., Bowe, M., Ball, J., Jensen, D., "A Student-Developed Teaching Demo of an Automatic Transmission," *Proceedings of the ASEE Annual Conference*, Albuquerque NM, June 2001**.**

Jensen, D., Randell, C., Feland, J., Bowe, M., "A Study of Rapid Prototyping for Use in Undergraduate Design Education", *Proceedings of the ASEE Annual Conference,* June 2002.

Wood, J., Winebrener, D., Bartolomei, J., Jensen, D., Rhymer, D., "Creating a Visually Rich, Active Learning Environment for Teaching Mechanics of Materials," *Proceedings of the ASEE Annual Conference*, June 2002.

Greer, J., Wood, J., Jensen, D., Wood, K., "Guidelines for Product Evolution Using Effort Flow Analysis: Results Of An Empirical Study," *Proceedings of the ASME 2002 International Design Engineering Technical Conferences*, Montreal, Canada, Sept., 2002.

Dutson, A., Green, M., Wood, K., Jensen, D., "Active Learning Approaches in Engineering Design Courses," *Proceedings of the ASEE Annual Conference*, June 2003.

Jensen, D., Wood, K., Wood, J., "A Design Methodology for Hands-on Experiences to Optimize Learning through Correlation with Learning Styles and Pedagogical Theory", *Proceedings of the ASEE Annual Conference*, Salt Lakes City, UT, June 2004.

Moe, R.E., Jensen, D.D., Wood, K.W., "Prototype Partitioning Based on Requirement Flexibility", *Proceedings of the ASME Design Education and Technology Conference*, Salt Lake City, UT, Sept, 2004.

Jensen, D., Wood, K., Crawford, R., Crowe, K., "An Evaluation of the DTEACh Robolab Summer Institute for 2004 – Assessment of Instructional and Hands-on Learning Correlated with MBTI Types", *Proceedings of the ASEE Annual Conference*, Portland, OR, June 2005.

Wood, J , Jensen, D., Wood, K., "Enhancing Machine Design Courses Through Use of a Multimedia-Based Review of Mechanics of Materials", *Proceedings of the ASEE Annual Conference*, Portland, OR, June 2005.

Jensen, D., Wood, J., Dennis, S., Wood, K., Campbell. M., "Design, Implementation and Assessment of a Suite of Multimedia and Hands-on Active Learning Enhancements for Machine Design Courses", *Proceedings of the ASME Annual Conference*, Orlando, FL, Nov., 2005.

Lindsey, J., Cobb, B., Jensen, D., Wood, K., "Methodology and Tools for Developing Hands-on Active Learning Activities" *Proceedings of ASEE Annual Conference*, Chicago, IL, June, 2006.

Green, M., Lindsey, J., Seepersad, C., Wood, K., Jensen, D., "Frontier Design: A Product Usage Context Method", *Proceedings of IDETC/CIE 2006, ASME 2006 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, September 10-13, Philadelphia, PA, 2006.

Atif Qureshi, Jeremy T. Murphy Benjamin Kuchinsky., Kristin Wood, Daniel Jensen "Innovations In Product Flexibility", *Proceedings of IDETC/CIE 2006, ASME 2006 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, September 10-13, Philadelphia, PA, 2006.

Skiles, S., Singh, V., Krager, J., Jensen, D., Wood, K., "Adapted Concept Generation and Computational Techniques to Apply Design Transformer Principles", *Proceedings of IDETC/CIE 2006, ASME 2006 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, September 10-13, Philadelphia, PA, 2006.

Singh, V., Skiles, S., Krager, J., Jensen, D., Wood, K., Szmerekovsky, A., "Innovations in Design Through Transformation: A Fundamental Study of Transformation Principles", *Proceedings of IDETC/CIE 2006, ASME 2006 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, September 10-13, Philadelphia, PA, 2006.

Talley, A., Lindsey, J., Jensen, D., Wood, K., "Development and Assessment of Active Learning Products to Enhance Engineering Mechanics Courses", *Poster Session- Proceedings of ASEE Annual Conference*, Honolulu, HI, June, 2007.

Lindsey, J., Talley, A., Jensen, D., Wood, K., Schmidt, K., Kuhr, R., Eways, S. "From Tootsie Rolls to Composites: Assessing a Spectrum of Active Learning Activities in Engineering Mechanics", *Proceedings of 2007 ASEE Annual Conference,* Honolulu, HI, June, 2007.

Singh, V., Walter, B., Krager, J., Putnam, N., Koraishy. B., Wood. K., Jensen, D. "Design for Transformation: Theory, Method and Application", *Proceedings of the IDETC/CIE 2007, ASME 2007 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, September, Las Vegas, NV, Sept 2007.

Schroeder, G., Moseby, D., Skibitsky, S., Duncan, M., Cordova. J., Szmerekovsky. A., Jensen. D., Wood, K."Innovative Solutions for Towing Micro Air Vehicles", *Poster presentation at Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, Washington DC, Aug, 2007.

Conrad, J., Gac, P., Meysenbourg, B., Morales, K., Forrester, K., Freaney, R., Szmerekovsky, A., Jensen, D., Wood, K.," Transforming Micro Air Vehicle Design", *Poster presentation Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference,* Washington DC, Aug, 2007.

Danielson, A., Becker, P., Baldwin, G., Collins, C., Erickson, S., Anderson, M., Wood, K., Jensen, D., Singh,V., Warren, L, "A Novel Exploration into Gust Resistant Operation of MAVs / UAVs Through Transformation", *Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, Washington DC, Aug, 2007.

Weaver, J., Wood, K., Jensen, D., "Transformation Facilitators: A Quantitative Analysis of Reconfigurable Products and their Characteristics", *Proceedings of the ASME 2008 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2008,* August 3-6, 2008, Brooklyn, New York, USA.

Mees, E., Johnson, W., VanBaren, W., Wright, S., Wood, J., Anderson, M., Jensen, D., Wood, K., "Micro Aerial Vehicle (MAV) Mission Life Extension Through Perching", *The Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, San Diego, CA, June, 2008.

Perry, C., Hua, B., Olsen, D., Parcus, J., Pedersen, K., Anderson, M., Wood, J., Jensen, D., Wood, K., "Revolutionary Solutions for the Enhanced Low Energy Expenditure ISR for MAVs/UAVs", *The Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, San Diego, CA, June, 2008.

Michael Yakima, Chris Schumacher, Dick Riley, John Smyrski, Seth Horner, Kyle Smith, Wood, J., Anderson, M., Jensen, D., Wood, K., "MAV Energizing: The Search for Aerial Energy", *The Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, San Diego, CA, June, 2008.

Lindsey, J., Talley, A., Jensen, D., Wood, K *"*PHLIpS for Active Learning", *Proceedings of 2008 ASEE Annual Conference,* Pittsburg, PA, June, 2008.

Talley, A., Jensen, D., Wood, K., Wood, J., Lindsey, J., "Active Learning Products to Enhance Engineering Education – Design, Implementation and Assessment", *Poster Session for NSF CCLI Awardees - 2008 ASEE Annual Conference,* Pittsburg, PA , June, 2008.

Brown, A., Rencis, J., Jensen, D., Chaun-Chang, C., Essam, I., Schimpf, P., "Finite Element Learning Modules for Undergraduate Engineering Topics Using Commercial Software", *Proceedings of 2008 ASEE Annual Conference,* Pittsburg, PN , June, 2008.

Anderson, M., Perry, C., Hua, B., Olsen, D., Jensen, D., Parcus, J., Pederson, K., "The Sticky-Pad Plane and other Innovative Concepts for Perching UAVs", *AIAA Annual Conference*, Orlando, FL, Jan 2009.

Jensen, D., Weaver, J., Wood, K., Wood, J., Lindsey, J., "Techniques to Enhance Concept Generation and Develop Creativity", *ASEE Annual Conference*, Austin, TX, June 2009.

Kaufman, K., Wood, K., Jensen, D., Brown, A., Rencis, J., "Correlating Student Demographic Data and Assessment Measures to Enhance Engineering Education Equitably Across Different Student Groups", *ASEE Annual Conference*, Austin, TX, June 2009.

Weaver, J., Kuhr, R., Wang, D., Crawford, R., Wood, K., Jensen, D., "Increasing Innovation in Multi-Function Systems: Evaluation and Experimentation of Two Ideation Methods for Design", *Proceedings of the ASME 2009 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2009, San Diego CA*, August 30-Sept 2, 2009.

Putnam, N., Jensen, D., Wood, K., Seepersad, C., "A Function-Based Strategy for Analysis of Energy Systems in Transportation Vehicles", *Proceedings of the ASME 2009 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2009, San Diego CA*, August 30-Sept 2, 2009.

Wang, D., Kuhr, R., Kaufman, K., Crawford, R., Wood, K., Jensen, D., "Empirical Analysis of Transformers on the Development of a Storyboarding Methodology", *Proceedings of the ASME 2009 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2009,San Diego CA*, August 30-Sept 2, 2009.

Wood, J., Leetsma, P., Culver, R., Gurrola, C., Sparta, M., Zheng, D., Philpot, T., VanOverloop, M., Wood, K., Jensen, D., "Development of Next-Generation Ornithopter Prototypes". *Proceedings of the Association Of Unmanned Vehicle Systems International: Unmanned Systems North America Conference,* Washington, DC, August 10-13, 2009.

Jensen, D., Walker, V., Crider, K., Weaver, J, Wood, K., "Effects of an Early Prototyping Experience: Can Design Fixation be Avoided?", *ASEE Annual Conference*, Louisville, KY, June 2010.

White, C., Wood, K., Jensen, D., "From Brainstorming To C-Sketch to Principles of Historical Innovators: Ideation Techniques To Enhance Student Creativity", *ASEE Annual Conference*, Louisville, KY, June 2010.

Coffman, J., Rencis, J., Jensen, D., "Structured Process for Writing, Revising, And Assessing Multiple-Choice Quizzes", *ASEE Annual Conference*, Louisville, KY, June 2010.

Linsey, J., Wood, K., Jensen, D., Schmidt, K., "Workshop on Designing Active Learning Activities and Associated Assessment Plans", *ASEE Annual Conference*, Louisville, KY, June 2010.

White, C., Linsey, J., Schmidt, K., Wood, K., Jensen, D., "Enhancing Engineering Education by Understanding Complexities of Students", *American Educational Research Association Annual Conference*, Denver, CO, April, 2010.

Wheeler, B., Edlund, C., Scott, E., Jensen, D., "Innovative Solutions for Counter-MAV Defense", *Proceedings of the Association of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, Denver, CO August, 2010.

Saunders, B., Pollock, S., Fleming, G., Hardin, J., May, E., Kimber, A., Szmerekovsky, A., Jensen, D., "Development of Extremely Long Term ISR Capabilities for a Small UAS"**,** *Proceedings of the Association Of Unmanned Vehicle Systems International: Unmanned Systems North America Conference*, Denver, CO August, 2010.

Kuhr, R., Crawford, R., Wood, K., Jensen, D., "Concept Opportunity Diagrams: A Visual Modeling Method to Find Multifunctional Design Concepts", *Proceedings of the ASME 2010 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC*, Montreal, Canada, August 2010.

Camburn, B., Guillemette, J., Crawford, R., Wood, K., Jensen, D., Wood, J., "When to Transform? Development of Indicators for Design Context Evaluation", *Proceedings of the ASME 2010 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC*, Montreal, Canada, August 2010.

Weaver, J., Wood, K., Crawford, R., Jensen, D., "Design of Energy Harvesting Technology: Feasibility for Low-Power Wireless Sensor Networks", *Proceedings of the ASME 2010 International Design Engineering Conferences & Computers and Information in Engineering Conference, IDETC*, Montreal, Canada, August 2010.

White, C., Wood, K., Jensen, D., "From Brainstorming to C-Sketch to Principles of Historical Innovators: Ideation Techniques to Enhance Student Creativity", *ASEE Global Colloquium on Engineering Education,* Singapore, Oct., 2010.

Dierks, E., Crider, K., Wood, K., Jensen, D., "Energy Harvesting for Engineering Educators", *ASEE Annual Conference*, Vancouver, Canada, June 2011.

Crider, K., Cumm, L., Jensen, D., Wood, K., "Body-Storming, Super Heroes and Sci-Tech Publications: Techniques to Enhance the Ideation Process", *ASEE Annual Conference*, Vancouver, Canada, June 2011.

Pace, P., Wood, J., Carson, J., Skibba, B., Jensen, D., Wood, K., "Studying Ideation in Engineering Design", *ASEE Annual Conference*, Vancouver, Canada, June 2011.

Camburn. B., Wood, K., Cumm, L., Lewis, J., Jensen, D., Wood, K., "Examination of a Method for Determining When to Develop Transformable Products through Design Studies", *ASEE Annual Conference*, Vancouver, Canada, June 2011.

Holloway, D., Mundy, A., Jensen, D., Camburn, B., Wood, K., "A Portability Rubric Applied to the Redesign of a Solar Power Generation System", ASEE *Annual Conference*, Vancouver, Canada, June 2011.

Kaufman, K., Jensen, D., Wood, K., Rencis, J., Brown, A. "Online Finite Element Tutorials as Active Learning Tools", *ASEE Annual Conference*, Vancouver, Canada, June 2011.

Weaver, J., Wood, K., Crawford, R., Jensen, D., "Exploring Innovation Opportunities in Energy Harvesting Using Functional Modeling Approaches", *Proceedings of the ASME 2011 International Design Engineering Technical Conferences, IDETC 2011*, August 29 – 31, 2011, Washington, DC, USA.

McEvoy, T., Dierks, E., Weaver, J., Inamdar, S., Zimowski, K., Wood, K., Jensen, D., Crawford. R., "Developing Innovative Energy Harvesting Approaches for Infrastructure Health Monitoring Systems", *Proceedings of the ASME 2011 International Design Engineering Technical Conferences, IDETC 2011*, August 29 – 31, 2011, Washington, DC, USA.

Krager, J., Wood, K., Crawford, R., Jensen, D., Cagan, J., Schunn, C., Linsey, J., White, C., "Understanding Innovation: A Study of Perspectives and Perceptions in Engineering", *Proceedings of the ASME 2011 International Design Engineering Technical Conferences, IDETC 2011*, August 29 – 31, Washington, DC ,2011.

Inamdar, S., Zimowski. K., Gibbons, K., Rucker, B., Jensen, D., Wood, K., Crawford, R., "Designing Novel Attachment Methods: A Methodology and Application to Energy Harvesting Systems," *ASEE Annual Conference, San Antonio, TX, June 2012.*

Jensen, D., Knodel, P., Vincent, R., Wood, J., Wood, K., "Evaluating Ideation using the Publications *Popular Science*, *Popular Mechanics* and *Make* in Coordination with a New Patent Search Tool and the 6-3-5 Method," *ASEE Annual Conference, San Antonio, TX, June 2012.*

Wood, K., Frey, D., Crawford, R., White, C., Mohan, R., Dym, C., Kaijima, S., Dritdsas, S., Jensen, D., "A Symphony of Designiettes – Exploring the Boundaries of Design Thinking in Engineering Education", *ASEE Annual Conference, San Antonio, TX, June 2012.*

Brown, S., Rencis, J., Jensen, D., Wood, K., "Improving Student Learning using Finite Element Learning Modules an Update in Research Findings," *ASEE Annual Conference, San Antonio, TX, June 2012.*

Christie, E., Jensen, D., Buckley, R., Menefee, D., Ziegler, K., Wood, K., Crawford R., "Prototyping Strategies: Literature Review and Identification of Critical Variables," *ASEE Annual Conference, San Antonio, TX, June 2012.*

Rhymer, D., Buckley, R., Jensen, D., "The Effects of Student Narration on Senior Level Engineering Classes," *ASEE Annual Conference, San Antonio, TX, June 2012.*

Camburn, B., Wood, K., Crawford, R., Jensen, D., Robbens, J., Patel, A., "Advances in Transformational Design: Correlating Context Evaluation to Quality, Feasibility and Novelty", *Proceedings of the ASME 2012 International Design Engineering Technical Conferences, IDETC 2012*, Sept. 12-15, Chicago, IL, USA, 2012.

Camburn, B., Wood, K., Crawford, R., Jensen, D., "Novel Topological Approach to Designing Flow Channels", *Proceedings of the ASME 2012 International Design Engineering Technical Conferences, IDETC 2012*, Sept. 12-15, Chicago, IL, USA, 2012.

Knauf, M., Vincent, R., Jensen, D., "Counter Tunnel Operations with a Rugged, Deployable, Object Avoiding Quad-Copter", *Proceedings of the Association of Unmanned Vehicle Systems International Annual Conference*, Las Vegas, NV, Aug 2012.

York, G., Royer, E. G., Harold, D., Jensen, D., "Assessment of a Multi-University Unmanned Systems Capstone Design Project", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Richards, W. J., Jensen, D., Christopher, J., "Video Recording vs. Class Visits: A Comparison of Two Faculty Development Tools", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Junhua, L., Dr., Zhang, Y., Ruths, J., Moreno, D., Jensen, D., Wood, K.L., "Innovations in Software Engineering Education: An Experimental Study of Integrating Active Learning and Design-based Learning", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Camburn, B., Dunlap, B., Viswanathan, V. K., Linsey, J., Jensen, D., Crawford, R., Otto, K., and Wood, K., "Connecting Design Problem Characteristics to Prototyping Choices to Form a Prototyping Strategy", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Wahlquist, J. A., Fitle, K., Carte, D., Jensen, D., Wood, K., "Using Mini Design Competitions in Capstone", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Brown, A., Jensen, D., Crawford, R, Rencis, J., Liu, J., Watson, K., Schmidt-Jackson, K., Hackett, R., Schimpf, P.H., Chen, C., Orabi, I., Akasheh, F., Wood, J., Dunlap, B., Ella R. Sargent, E. R., "Assessment of Active Learning Modules: An Update of Research Findings", *Proceedings of the ASEE Annual Conference,* Atlanta, GA, June 2013.

Camburn, B., Dunlap, B., Kuhr, R., Viswanathan, V., Linsey, J., Jensen, D., Crawford, R., Otto, K., Wood, K., "Methods for Prototyping Strategies in Conceptual Phases of Design: Framework and Experimental Assessment", *Proceedings of the ASME 2013 International Design Engineering Technical Conferences,* Portland, OR, Aug., 2013.

Fu, K., Murphy, J., Yang, M., Otto, K., Jensen, D., Wood, K., "Investigating the Effect of Functionality Level of Analogical Stimulation on Design Outcomes", *Proceedings of the ASME Design Engineering Workshop*, Kitakyushu, Fukuoka, Japan, November 28 - 30, 2013.

Brown, A., Jensen, D., et. al., "Assessment of Finite Element Active Learning Modules: An Update in Research Findings by Gender and Ethnic Groups", *Proceedings of the American Society for Engineering Education Annual Conference*, Indianapolis, IN, June 2014.

Powell, R., Richards, M., Jensen, D., "Increasing Conceptual Understanding in an Engineering Core Course using a Statics Visualization Program," *Proceedings of the American Society for Engineering Education Annual Conference*, Indianapolis, IN, June 2014.

Hamon, C., Green, M., Dunlap, B., Crawford, R., Jensen, D., Camburn, B., "Virtual or Physical Prototypes?, Development and Testing of a Prototyping Planning Tool", *Proceedings of the American Society for Engineering Education Annual Conference*, Indianapolis, IN, June 2014.

Murphy, J., Fu, K., Otto, K., Yang, M., Jensen, D., Wood, K., "Facilitating Design-by-Analogy: Development of a Complete Functional Vocabulary and Functional Vector Approach to Analogical Search", *Proceedings of the ASME 2014 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, IDETC/CIE 2014, August 17-20, Buffalo, New York, USA, 2014.

Dunlap, B., Green, M., Hamon, C., Jensen, D., Crawford, R., Camburn, B., Otto, K., Wood, K., "Heuristics-Based Prototyping Strategy Formation: Development and Testing of a New Prototyping Planning Tool", *Proceedings of the ASME 2014 International Annual Conference*, November, 2014.

Marshall, S., Green, M., Crawford, R., Jensen, D., "Analogy Seeded Mind-Maps: Testing of A New Design-By-Analogy Tool", *Proceedings of the ASME 2014 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, IDETC/CIE,* August 17-20, 2014, Buffalo, New York, USA, 2014.

Camburn, B., Jensen, D.; Crawford, R.; Otto, K.; Wood, K., "Evaluation of a Strategic Method to Improve Prototype Performance with Reduced Cost and Fabrication Time", *Proceeding of the Intl. Conference on Engineering Design*, Milan, Italy, July 2015.

Camburn, B., Hui En Sng, K., Perez, B., Otto, K., Jensen, D., Crawford, R., Wood, K., "The Way Makers Prototype: Principles of DIY Design", *Proceedings of the ASME 2015 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, IDETC/CIE,* August, 2015, Boston, MA, USA, 2015.

Marshall, K., Crawford, R., Jensen, D., "Analogy Seeded Mind-Maps: A Simple and Quick Design-by-Analogy Method," *Proceedings of the American Society for Engineering Education Annual Conference*, Seattle, WA, June 2015.

Cooper, C., Bruce, C., Anderson, M., Galyon-Dorman, S., Jensen, D., "Designettes in Capstone: Initial Design Experiences to Enhance Students' Implementation of Design

Methodology", *Proceedings of the American Society for Engineering Education Annual Conference*, Seattle, WA, June 2015.

Brown, A., Crawford, R., Jensen, D., "Active Engineering Education Modules: A Summary of Recent Research Findings", *Proceedings of the American Society for Engineering Education Annual Conference*, Seattle, WA, June 2015.

Gurjar, T., Crawford, R., Jensen, D., "Effects of a Structured Prototyping Strategy on Capstone Design Projects*", Proceedings of the American Society for Engineering Education Annual Conference*, New Orleans, LA, June 2016.

Cooper, C., Anderson, M., Jensen, D., Wood. K., "Designettes in Capstone: Characterizing the Impact of Early Design Experiences on Students' Capstone Education", *Proceedings of the American Society for Engineering Education Annual Conference*, New Orleans, LA, June 2016.

Brown, A., Crawford, R., Jensen, D, "Active Engineering Education Modules: Summary Paper of Five Years of Incremental Improvements to the Modules", *Proceedings of the American Society for Engineering Education Annual Conference*, New Orleans, LA, June 2016.

Buckley, R., Hilburn, S., Jensen, D., Hudson, T., "A Design Methodology for Additive Manufacturing", *ASME AM3D Additive Manufacturing and 3D Printing Conference*, Charlotte, NC, Aug, 2016.

Schafer, K., Jensen, D., Wood, K., Miller, M., et.al., "Singapore – U.S. Tactical All-inclusive Navigation (SYSTAIN) Collaboration", *ASEE International Forum*, New Orleans, LA, June 2016.

Marshall, S., Crawford, R., Jensen, D., "Analogy Seeded Mind-Maps: A Comparison of Verbal and Pictorial Representation of Analogies in the Concept Generation Process", *ASME Intl. Design Engineering Technical Conference,* Charlotte, NC, Aug, 2016.

Cooper, C., Anderson, M., Jensen, D., Wood. K., "Designettes in Capstone: Impact of Early Design Experiences in Capstone Education with Emphasis on Depth of Design Process Content", *Proceedings of the American Society for Engineering Education Annual Conference*, Columbus, Ohio, June 2017.

Teope, K., Jensen, D., Fortney, E., and Anderson, M.L., "Reconfigurable Internal Weapons Carriage System for Small Fighter Aircraft," *AIAA SciTech*, Dallas, TX, AIAA Paper, January, 2017.

Anderson, M., Onyechi, J., Yamazaki, T., Wood, K., and Jensen, D., "Mind Map for Biologically Inspired Covert Visual Systems: A pilot study", *Proceedings of the ASEE Rocky Mountain Section Conference*, Provo UT, 2017.

Bauer. A., Doria, M., Perez, B., Jensen, D., Anderson, M., Wood, K., Jensen, L., "A Bio-Inspired Mind Map to Assist in Concept Generation for Wall Climbing Systems: Development, Assessment and Resulting Prototypes", *Proceedings of the American Society for Engineering Education Annual Conference*, Salt Lake City, UT, June 2018.

Tiong, E., Seow, O., Teo, K., Silva, A., Wood, K., Jensen, D., Yang, M., "The Economics and Dimensionality of Prototyping: Value, Time, Cost and Fidelity", *Proceedings of the ASME 2018 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, *IDETC/CIE,* August 26-29, Quebec City, Canada, 2018.

Seow, O., Tiong, E., Teo, K., Silva, A., Wood, K., Jensen, D., Yang, M., "Design Signatures: Mapping Design Innovation Processes", *Proceedings of the ASME 2018 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, *IDETC/CIE,* August 26-29, Quebec City, Canada, 2018.

Camburn, B., He, J., Luo, J., Jensen, D., Wood, K., "Exploring the Automated Synthesis of Design Concepts, Design Science Research (DSR) Conference", Montreal, Quebec, Canada August 23-25, 2018.

Perez, B., Hilburn, S., Jensen, D., Wood, K., "Design principle-based stimuli for improving creativity during ideation", Proc IMechE Part C: Journal of Mechanical Engineering Science, 2018.

Anderson, M., Jensen, D., "Creativity Exercises and Design Methods to Enhance Innovation in Engineering Students", ASEE Annual Conference, June 2019.

Menefee, M., Pokharel, M., Jensen,D., Yakacki, C., Kaplan, B., Wood, K., "Design Innovation Incorporating Additive Manufacturing: Creation and Assessment of a Design Tool", *Proceedings of the ASME 2020 Engineering Technical Conference,* IMECE2020, November 15-18, 2019, Portland, OR- Virtual, USA

Collopy, A., Wood, K., Jensen, D., "Design Innovation in Complex Systems Design: Integrating Design Thinking and Systems Thinking", *Proceedings of the ASME 2020 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, *IDETC/CIE,* August, St. Louis, MO- Now Virtual, 2020.

Collopy, A., Wood, K., Jensen, D., "Knowing the Unknowable: Understanding and Measuring Design Impact Across Disciplines and Scale", *Proceedings of the ASME 2020 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, *IDETC/CIE,* August, St. Louis- Now Virtual, MO, 2020.

Collopy, A., Wood, K., Jensen, D., "Design Odyssey: A Co-Curricular Design Innovation and Entrepreneurship Program for Systemic Change in Design Education", *Proceedings of the ASME 2020 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, *IDETC/CIE,* August, St. Louis, MO- Now Virtual, 2020.

Venkatesh, A., Wood, K., Jensen, D., Collopy, A., Loo, G., Sng, K., "Knowing the Unknowable : Understanding and Measuring Design Impact across Disciplines and Scale", Proceedings of the ASME 2021 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, IDETC/CIE2020, Virtual, Online, 2020.

McIntire, J., Harlow, F., May, E., Wilson, C., Jensen, D., "Health and Safety Innovations to Reduce the Spread of Contagious Disease", IEEE 2021 International Symposium on Technologies for Homeland Security (HST), Nov 2021.

Guinto, J., Lush, J., Jensen, D., Reich, G., "Increased Understanding of the Digital vs. Physical Prototyping: Tradeoffs through Development and Assessment of Design Process & Heuristics", ASME IMECHE, Presentation Only, Nov. 2022.

Jensen,D., Jensen, L., Allison, W., Estrada-Lopez, J., Assessing Distinctives of the New Westmont Engineering Program in Terms of Their Impact on Recruitment, Student Satisfaction and Employment Potential, *Proceedings of the American Society for Engineering Education Annual Conference*, Minneapolis, MN, June 2022.

Lush, J., Guinto, J., Jensen, D., Allison, W., Using the Kolb Cycle to Enhance Undergraduate Research Experiences, *Proceedings of the American Society for Engineering Education Annual Conference*, Baltimore, MD, June 2023.

Cicileo, E., Swanson, J., Wozniak, J., Loh, T., Jensen, D., Reich, G., "A Weighted Design Matrix Approach for Informing Digital vs. Physical Prototyping Options", *Proceedings of the American Society for Engineering Education Annual Conference*, Portland, OR, June 2024.

Jensen, D., Cicileo, E., Judy, M., McIntire, L., McIntire, J., Reich, G., "A Design Tool to Support Decisions on the use of Digital vs. Physical Prototyping", *Proceedings of the American Society of Mechanical Engineering Annual Conference*, Portland, OR Nov., 2024.

Jensen, D., Reich, G., Jensen, C., Shen, N., Vanderhyde, L., Knight, T., Rogers, M., Rapola, M., Artificial Intelligence & Engineering Design: How AI Impacts a Suite of Design Innovation Methods, *Proceedings of the American Society for Engineering Education Annual Conference*, Montreal, CA, June, 2025.

Pablos, M., Hibbs, R., Knight, T., Wozniak, J., Wilcox, C., McIntire, L., McIntire, J., Jensen, C., Jensen, D., "Development and Integration of a Wearable Biometric Sensor Suite for Assessing Physical and Cognitive State", Proceedings of the Applied Human Factors and Ergonomics (AHFE) Conference, Honolulu, HI, December, Volume 199 of the Applied Human Factors and Ergonomics International: ISSN 2771-0718, ISBN: 978-1-964867-75-5, 2025.

Goodworth, A., Allison, W., Velgersdyk, P., Gauga, W., Allen, T., Jensen, D., "Sensitivity of Mechanical Properties to User Defined Variables in Fused Filament Fabrication Additive Manufacturing: Number of Perimeters, Layer Height, and Print Orientation", Proceedings of the *ASME International Manufacturing Science and Engineering Conference (MSEC2026),* SUBMITTED for, State College, PA, June 2026.

Velgersdyk, P., Young, S., Allen, T, Allison, W., Jensen, D., "Creation, Implementation and Assessment of a AI-assisted Bio-Inspired Mind Mapping Method for Enhanced Ideation in Engineering Design", SUBMITTED, *Proceedings of the American Society for Engineering Education Annual Conference*, Charlotte, NC, June 2026.

III.2 Refereed Journal Papers and Books

Jensen, D.D., Park, K.C., "Equilibrium Constrained Assumed Natural Coordinate Strain Plate Elements," *International Journal of Numerical. Methods in Engineering.*, Vol. 38, pp. 2951-2977, 1995.

Jensen, D.D., Pramono, E., "A Method for Teaching Finite Elements Which Combines the Advantages of Commercial Pre and Post -Processing with Student Written Software," *Computer Applications in Engineering Education,* Vol. 6, No. 2, pp. 105-114, June 1998.

Jensen, D., Borchert, R., "MSC/Patran Used to Improve Education by Providing Visualization of Stress Concepts," *MSC World*, Feb., 1999.

Shakerin, S., Jensen, D., "Enhancement of Mechanics Education by Means of Photoelasticity and the Finite Element Method," *International Jour. of Mechanical Engineering Education*, Vol 29, No. 4, pp. 307-320, Oct. 2001.

Wood, K., Jensen, D., Bezdek, J., Otto, K., "Reverse Engineering and Redesign: Courses to Incrementally and Systematically Teach Design," *Journal of Engineering Education*, pp. 363-374, July 2001.

Jensen, D., Self, B., Rhymer, D., Wood, J., Bowe, M., "A Rocky Journey toward Effective Assessment of Visualization Modules for Learning Enhancement in Engineering Mechanics," *Journal of Educational Technology & Society: Special issue on 'Evaluation of Learning Technologies in Higher Education'*, Vol. 5, No 3, July, 2002.

Jensen, D.D., Wood, J.J. and Wood, K.L., "Hands-on Activities, Interactive Multimedia and Improved Team Dynamics for Enhancing Mechanical Engineering Curricula". *International Journal of Engineering Education*, **19** (No. 6): p. 874-884, 2003.

Greer, J., Jensen, D., Wood. K., "Effort Flow Analysis, a Methodology for Directed Product Evolution" *Journal of Design Studies*, Volume 25, Issue 2 , , Pgs 193-214, March 2004.

Wood, J., Campbell, M., Wood, K., Jensen, D., Enhancing the Teaching of Machine Design by Creating a Basic Hands-on Environment with Mechanical Breadboards", *International Journal of Mechanical Engineering Education*, Vol. 33, No. 1, pp. 1-25, Jan 2005.

Dennis, S., Jensen, D., "Planetary Gear Set and Automatic Transmission Simulation for Machine Design Courses", *Computer Applications in Engineering Education*, Vol. 11, Issue3, pp 144-155, Jan, 2003.

Singh, V., Skiles S., Krager, J., Jensen, D., Wood, K., Sierakowski, R., "Innovations in Design through Transformation: A Fundamental Study of Transformation Principles", *ASME Journal of Mechanical Design*, Vol. 131, Iss. 8, Aug., 2009.

Green, M., Jensen, D., Seepersad, C., Wood, K., "Design for Frontier Contexts: Classroom Assessment of a New Design Methodology with Humanitarian Applications", *International Journal of Engineering Education*, Vol. 25, No. 5, 2009.

Singh, V., Walther, B., Wood, K., Jensen, D., Chapter X – Innovation through Transformation, in **Tools for Innovation**, Editors Markman, A., Wood, K., Oxford University Press, 2009.

Linsey, J., Talley, A., Jensen, D., Wood, K., "From Tootsie Rolls to Broken Bones: An Innovative Approach for Active Learning in Mechanics of Materials", *Advances in Engineering Education Journal*, Vol. 1, Number 3, Winter, 2009.

Weaver, J., Wood, K., Crawford, R., Jensen, D., "Transformation Design Theory: A Meta-Analogical Framework", *ASME Journal of Computing and Information Science in Engineering*, Sept, 2010.

Kauffman, K., Wood, K., Jensen, D., Brown, A., Rencis, J., "Finite Element Learning Modules as Active Learning Tools", *Advances in Engineering Education*, Winter 2012, volume 3, number 1, 2012.

White, C., Jensen, D., Wood, K., "From Brainstorming to C-Sketch to Principles of Historical Innovators: Ideation Techniques to Enhance Student Creativity," *Journal of STEM Education*, Vol. 13, Issue 5, 2012.

Camburn, B., Jensen, D., Otto, K., Crawford, R., Wood, K., "Designing Biologically Inspired Leaf Structures: Computational Geometric Transport Analysis of Volume-To-Point Flow Channels", *Engineering with Computers*, 31:361-374, 2015.

Murphy, J., Fu, K., Wood, K., Otto, K., Yang. M., Jensen, D., "Design-by-Analogy: Experimental Evaluation of a Functional Analogy Search Methodology for Concept Generation Improvement", *Research in Engineering Design*, Dec, 2014.

Murphy, J., Fu, K., Otto, K., Yang, M., Jensen, D., Wood, K., "Function Based Design-By-Analogy: A Functional Vector Approach to Analogical Search", *ASME Journal of Mechanical Design*, #136-10, Oct, 2014.

Camburn, B., Green, M., Dunlap, B., Jensen, D., Gurjar, T., Crawford, R., Hamon, C., Otto, K., Wood, K., "A Systematic Method for Design Prototyping", ASME Journal of Mechanical Design, 137(8), Aug 01, 2015.

Camburn, Bradley Adam; Jensen, Daniel; Crawford, Richard; Otto, Kevin; Wood, Kristin, "Evaluation of a Strategic Method to Improve Prototype Performance with Reduced Cost and Fabrication Time", DS 80-4 Proceedings of the 20th International Conference on Engineering Design (ICED 15) Vol 4: Design for X, Design to X, Milan, Italy, 27-30.07.15

Camburn, B., Viswanathan, V., Linsey, J., Otto, K., Crawford, R., Jensen, D., Wood, K., "Design Prototyping Methods: State-of-the-art in Technology, Strategies and Heuristics", Design Science Journal, April, 2017.

K. Kays, A. Hoisington, J. Christ, D. Rhymer, D. Jensen, C. Cooper, **"Risk-taking in Engineering Instruction (United States Air Force Academy)," Risk Taking in Higher Education**, eds. R. Kelty, and B. Bunten, Roman and Littlefield Publishing, Lanham, MD, 2017.

Daniel D. Jensen and Cory A. Cooper, "Enhancing Innovation: Methods, Cultural Aspects, Ideation Approaches, and Box Busters," Adedeji Badiru and Anna Maloney (Eds.), **Defense Innovation Handbook: Guidelines, Strategies, and Techniques**, Taylor and Francis/CRC Press, 2018.

Tiong, E., Seow, O., Teo, K., Silva, A., Wood, K., Jensen, D., Yang, M., "The Economics and Dimensionality of Prototyping: Value, Time, Cost and Fidelity", ASME *Journal of Mechanical Design, Vol. 141, Issue 3, March 2019.*

Camburn, B., Arlitt, R., Anderson, D., Sanaei, R., Raviselam, S., Jensen, D., Wood, K., "Computer Aided Mind Map Generation via Crowd Sourcing and Machine Learning", Research in Engineering Design, June 2020.

Dongwook, H., Camburn, B., Perez, B., Anderson, D., Wood, K., Jensen, D., Design Principles for Additive Manufacturing: Leveraging Crowdsourced Design Repositories, ASME Journal of Mechanical Design, MD-20-1656, 2021.

J. Avilés-Viñas, R. Carrasco-Alvarez, J. Vázquez-Castillo, J. Ortegón-Aguilar, J. Estrada-López, Daniel D. Jensen, R. Peón-Escalante, A. Castillo-Atoche, An Accurate UAV Ground Landing Station System based on BLE-RSSI and Maximum Likelihood Target Position Estimation, Applied Sciences, June 2022.

Venkatesh, Ashreya ; Jensen, Daniel ; Hayat, Abdullah Aamir; Loo, Genine ; Sng, Karen ; Wood, Kristin; Silva, Arlindo; Luo, Jianxi; Elara, Mohan., "Measuring Design Impact across Disciplines, Industries and Scale", SUBMITTED Journal of Product Innovation Management, Jan. 2024.

Wood, K., Lauff, C., Hui, W.Y., See, A., Raviselvam, S., Collopy, A., Jensen, D., Tweeo, K., Png, S., Swee, A., **Design Innovation Methodology Handbook – Embedding Design in Organisations,** Second Edition, Published by the Design Innovation Team, DesignZ Centre, Singapore University of Technology and Design, ISBN 78-981-18-7593-9, DOI: https://doi.org/10.59977/VQPH8086, 2023.

III.3 Invited papers/presentations

Jensen, D. "Computer Aided Engineering: Recent Advances and Continuing Challenges," Invited presentation to Staff Scientists at Lawrence Berkeley National Laboratories, June, 1995.

Jensen, D., "The Finite Element Method: An Indispensable Tool for Engineering Analysis," Invited presentation to design and analysis team at Advanced Aerospace Structures Corp., Stockton, CA, May 1996.

Shakerin, S., Jensen, D., "Photoelasticity and its Synergism with the Finite Element Method: A report on NSF ILI Grant DUE 9751315," Invited for publication in *Proceedings of ASEE Annual Conf.*, Charlotte, NC, June, 1999.

Talreja, R, Jensen, D., Bowe, M., "Information and Technology in Education", Issues in Engineering Education (Session 52-ED-1)," Invited for the AIAA Annual Aerospace Sciences Conference, Reno NV, Jan 00.

Bowe, M., Jensen, D., Feland, J., Self, B., "When Multimedia *Doesn't* Work: An Assessment of Visualization Modules for Learning Enhancement in Mechanics," Invited *Technology Paper: Institute for Information and Technology Applications*, U S Air Force Academy, CO, Aug., 2000.

Jensen, D., Wood, K., "Incorporating Learning Styles to Enhance Mechanical Engineering Curricula by Restructuring Courses, Increasing Hands-on Activities, & Improving Team Dynamics," Invited ASME Publication & Presentation for the Award for the Most Innovative Curriculum for the year 2000, Presented at the *ASME Annual Conference*, Orlando, FL, Nov, 2000.

Jensen, D.D. "Force Flow Analysis," Invited presentation on AFOSR Sponsored Research, USAF Academy, May 2001

Vikramjit Singh, Logan Warren, Nathan Putnam, Phillip Becker, Adam Danielson, Brandon Walther, Babar Koraishy, Kristin Wood, Dan Jensen, Andy Szmerekovsky, "A Novel Exploration into Gust Resistant Operation of MAVs / UAVs Through Transformation", Invited paper and presentation for the 2nd US-Euro MAV Competition, Nov 30, 2006.

Invited Presentation for the AFRL Chief Scientist, Eglin AFB, "Transformation Design Methologies", May 2006.

Jensen, D. Wood, K., "Innovative Design Approaches: Principles to Increase Innovation Using tRaNsFoRmAtIoN & Design by Analogy", Invited presentation for AFRL's Rapid Response Team, Kirtland AFB, Dr Alok Das, Head, Nov. 21, 2006.

Wood, K., Jensen, D., "Innovative Design Approaches: Design for tRaNsFoRmAtIoN & Design by Analogy", Invited presentation for NSF Innovation Workshop, Austin TX, Dec 8th, 2006.

Jensen, D., "Infusion of Active Learning and Creativity into Engineering Curriculumn", Invited presentation at the 18th International Conference on College teaching and Learning, Ponte Verda Beach, FL, April, 2007.

Wood, K.L., Jensen, D.D., Processes that Produce Innovative Design Solutions", Invited presentation for AFRL's Kirtland Commander's Challenge Team, Eglin AFB, Dr Alok Das, Head, April, 2007.

Jensen, D., Wood, K., Szmerekovsky, A., Anderson, M.," Innovative Technologies for MAVs – Transformation, Towing, Gust Resistant and Energy Solutions", Invited briefs for the Chief Scientist, AFRL/MN, May 2007.

Jensen, D., Wood, K., "Innovative MAV Designs Based on Transformation", Invited presentation for the AFRL UAS Workshop, Wright Patterson AFB, Jan, 2008.

Wood, K.L., Jensen, D.D., "Innovative Rapid Prototyping Processes", Invited presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2008.

Jensen, D., Wood, K., Szmerekovsky, A., Anderson, M.," Innovative Technologies for MAVs – Perching & Refueling Solutions", Invited briefs for the Chief Scientist, AFRL/MN, May 2008.

Wood, K., Linsey, J, Jensen, D., Talley, A., "Designing Active Learning Activities and Associated Assessment Plans", *Invited Poster & Presentation for the National Science Foundation CCLI Symposium*, Washington DC, Aug, 2008.

Brown, A., Rencis, J., Jensen, D., "Finite Element Learning Modules for Undergraduate Courses", *Invited Poster for the National Science Foundation CCLI Symposium,* Washington DC, Aug, 2008.

White, C., Wood, K., Jensen, D., "Active Learning Research - A Basis for the Design of Classroom Activities", *Invited Presentation to the ASEE 7th Global Colloquium on Engineering Education in Cape Town, South Africa,* October 19 – 23, 2008.

Jensen, D.D., Wood, K.L., "Innovative Design Practices Including Transformational design Opportunities", Invited presentation for AFRL/RV – Robotics Division, Tyndall AFB, Mr. Brian Skibba, Head, March, 2009.

Wood, K.L., Jensen, D.D., "Rapid Development of Innovative Systems", Invited presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, March, 2009.

Wood, J., Jensen, D., Wood, K., "MAVs That Can Tag-Track & Provide Effects", Invited briefs for the Chief Scientist, AFRL/RW, Eglin Air Force Base, May 2009.

Jensen, D., Wood, K., Wood, J. "New Developments in Perching, Hiding and Ornithopter MAV Systems", Invited briefs for the Air Vehicles Scientists, AFRL/RB, Wright Patterson Air Force Base, April, 2009.

Jensen, D., Wood, K., "Development of Innovative Systems for Protection of Forward Operating Bases", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2010.

Jensen, D., Sierakowski, R., Lumsdaine, E., "Innovation in the Design Process as it Applies to Micro Air Vehicles," Invited Presentation for Aerovironment Corp., Simi Valley, CA, 2010.

Jensen, D., Wood, K., "Innovative Systems Development for Protection against Ultra-Light Aircraft threats", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2011.

Jensen, D., Wood, K., "Innovative rapid Prototyping Strategies for Mitigation of Small UAS threats", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2012.

Jensen, D.,"New Developments in Design Methods for Innovative Concept Generation", Invited briefs for the Air Vehicles Scientists, AFRL/RB, Wright Patterson Air Force Base, April, 2012.

Jensen, D., Crawford, R., Invited 2-Day Workshop on Active Learning Techniques, Singapore Univ. of Technology and Design, Singapore, February, 2012.

Jensen, D., Invited talk: Active Learning Methods for Engineering Education, Invited Seminar, LeTourneau University, Longview, TX, Oct., 2012.

Jensen, D., Enhancing Creativity in Design, Invited talk at the Colorado School of Mines, Nov. 2012.

Jensen, D., Crawford, R., Invited 2-Day Workshop on Active Learning Techniques, Singapore Univ. of Technology and Design, Singapore, March, 2013.

Jensen, D., Invited Presentation for Spectranetics Corp., "Processes that Lead to Innovation in Product Design", Feb, 2013.

Jensen, D., Invited Presentation for AFRL/RW and DTRA, (Eglin AFB), "Research in Prototyping Strategies", April, 2013.

Jensen, D., Invited Presentation for Spectranetics Corp., "Innovation in Product Design", 2014.

Gibbons, K., Jensen, D. (with students), Invited Presentation for Office of the Secretary of Defense, Corrosion Protection Office, Advances in Corrosion Protection for Infrastructure. 2014.

Jensen, D. (with students), Invited Presentation for Defense Advanced Research Projects Agency (DARPA), Innovation in Special Operations Technology, 2014.

Jensen, D., Wood, K., "Innovative Strategies for Rapid Prototyping", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2014.

Jensen, D., Wood, J. "New Developments in Innovative Mitigation for Hard Deeply Buried Targets", AFRL/RW, Eglin Air Force Base, April, 2014.

Jensen, D., Invited Presentation on Innovative Design Techniques, Singapore Univ. of Technology and Design, Singapore, March, 2015.

Gibbons, K., Jensen, D. (with students), Invited Presentation for Office of the Secretary of Defense, Corrosion Protection Office, Advances in Sacrificial Anode Corrosion Protection for Infrastructure. 2015.

Jensen, D. (with students), Invited Presentation for Defense Advanced Research Projects Agency (DARPA), Innovation in Munitions Technology, 2015.

Jensen, D., Wood, K., "Innovative Strategies for Rapid Design Development", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2015.

Jensen, D., "New Developments in Innovative Mitigation for Munitions", AFRL/RW, Eglin Air Force Base, April, 2015.

Gibbons, K., Jensen, D. (with students), Invited Presentation for Office of the Secretary of Defense, Corrosion Protection Office, Advances in Replaceable Anode Corrosion Protection for Infrastructure. 2016.

Jensen, D., Invited Presentation for Air Force Research Labs, Techniques to Enhance Innovation", 2016.

Jensen, D., Invited 2-dayu workshop for Air Force Research Labs, Methods to Enhance Creativity and Innovation", 2016.

Jensen, D. (with students), Invited Presentation for Defense Advanced Research Projects Agency (DARPA), Innovation in Ship Locomotion Defeat Technology, 2016.

Jensen, D., Wood, K., "Innovative Strategies for Rapid Design of Counter UAV Technology", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, April, 2016.

Anderson, M., Jensen, D., (with students) "New Developments in Innovative Mitigation for Automated Runway Repair", AFRL/RW, Eglin Air Force Base, April, 2016.

Anderson, M., Jensen, D., (with students) "Innovation in Hard Deeply Buried Target Defeat", AFRL/RW, Eglin Air Force Base, April, 2016.

Shertzer, R., Jensen, D., (with Students), Assessment of Arterial Disease Using Hyper Spectacular Analysis, Invited Presentation for Spectranetics Corp., 2017.

Cooper, C., Jensen, D., (with students), Innovative Counter UAS Technology, Invited Presentation for Joint Improvised Defeat Organization (JIOD), 2017.

Gibbons, K., Jensen, D. (with students), Invited Presentation for Office of the Secretary of Defense, Corrosion Protection Office, Implementation of Corrosion Protection for Infrastructure, 2017.

Jensen, D., Wood, K., "Innovative Strategies for Rapid Design of Special Operations Equipment Transport", Invited Presentation for AFRL's Commander's Challenge Kickoff Meeting, Wright Patterson AFB, Dr Alok Das, Head, Aug., 2017.

Anderson, M., Jensen, D., (with students) "New Developments in Innovative Mitigation for Forward Seeking Munitions", AFRL/RW, Eglin Air Force Base, April, 2017.

Hilburn, S., Jensen, D. (with students), Invited Presentation for Air Force Civil Engineering Command, Advanced Methods to Mitigate Threats from Improvise Explosive Devices, 2017.

Anderson, M., Jensen, D., (with students) "Innovation in Infiltration of Hard Deeply Buried Targets", AFRL/RW, Eglin Air Force Base, April, 2017.

Jensen. D., (with students) "Launch and Recovery of Unmanned Full-Scale Fighter Drones", AFRL/RY, Wright Patterson AFB, 2017.

Jensen, D., "Innovation in Product Design", for Amazon's Lab 126, Sunnyvale, CA, Sept. 2017.

Jensen, D., "Methods to Enhance Innovation in Infrastructure Protection", for Kane Geo-tech, Stockton, CA, Sept 2017.

Jensen, D., "Transformational Design and other Innovation Enhancing Design Methods", for Faculty, Harvard Univ., May 2018.

Jensen, D., Research in Design Methods to Enhance Creativity and Innovation, for Faculty, Campbell Univ., July 2018.

Jensen, D., Innovation in Product, Systems and Service Design, for Senior Leadership, Air Force Research Labs, Wright Patterson AFB, OH, Aug, 2018.

Jensen, D., Mini-Workshop on Design Thinking and Innovation for Products, Systems and Services Design, Human Performance Wing of Air Force Research Labs, Wright Patterson Air Force Base, Dec 2018.

Jensen, D., Innovation in Air Defense, AFRL Weapons Directorate, Eglin AFB, FL, Jan, 2019.

Jensen, D., Creativity Infused into Air Defense Scenarios, AFRL Weapons Directorate, Eglin AFB, FL, Feb, 2019.

Jensen, D., Hendricks, M., Innovation in Design of AF Services, Joint Base Andrews AFB, Wash. D.C., April 2019.

Jensen, D., Design of Innovative Security Systems, AFRL Human Performance Directorate, Dayton, OH, June 2019.

Jensen, D., Wood, K., Innovation in the Commander's Challenge, for AFRL Headquarters, Dayton OH, June, 2019.

Jensen, D., Hendricks, M., Innovation in Products and Services for the Air Force, +Scott AFB, St Louis, MO, Aug, 2019.

Jensen, D., Innovation in Design of Products and Testing Processes, AFRL Air Vehicles, Arnold AFB, TN Sept, 2019.

Jensen, D., Innovation in Design of Medical Products, Philips Medical, Colorado Springs, CO, Jan, 2020.

Jensen, D., Hendricks, M., Innovation in Testing and Product Development, Edwards AFB, CA, April 2021.

Jensen, D., Reich, G., Fernelius, M., Innovation in the Design of Products, Processes and Services, Feb, 2021.

Jensen, D., Hendricks, M., Design Innovation Training Workshop for Edwards Air Force Base, Sept. 2021.

Jensen, D., Hendricks, M., Empowering Subject Matter Experts- Workshop for Edwards Air Force Base, Jan 2021.

Jensen, D., Failure Modes and Effects Analysis as Applied to the TALOS Project, Oct., 2021.

Jensen, D., Establishing Priorities for the Strategic Plan – for the Chief Scientist, ARFL-RY, 2022.

Jensen, D., Lush, J., Giunto, J., Digital vs. Physical Prototyping, AFRL at Wright Patterson AFB, Nov, 2022.

Jensen, D., Loh, T., Wozniak, J., Swanson, J., Cicileo, E., A Weighted Design Matrix Method for Guiding Digital vs Physical Prototyping Decisions", AFRL at Wright Patterson AFB., Invited for Sept 2023.

Jensen, D., Wood, K., An Innovative Product Design Methodology, for the AFRL Commander's Challenge at Wright Patterson AFB., Invited May 2024.

Jensen, D., Core Principles of Design Engineering and Innovation, for the Special Technology Lab of the Dept. of Energy, Goleta, CA. Feb, 2025.

Jensen, D., Shen, N., Vanderhyde, L., Knight, T., Rogers, M., Rapola, M., AI & Engineering Design, Air Force Research Lab, Dayton OH, March 31, 2025.

Jensen, D., Innovation in Product Design as Applied to Fiber Optic Drones, Dayton, OH, Jan 2025.

Velgersdyk, P., Jensen, D., AI-Assisted Engineering Design, ASME IMECE Conference, Memphis, TN, Nov. 2025.

III.4 Other (manuscripts, thesis)

Jensen, D.D., "Equilibrium Constrained Assumed Natural Coordinate Strain Finite Elements for Shell Analysis," Ph.D. Thesis, University of Colorado, Boulder, 1992.

Jensen, D. D., Wood, J.W., Dimas, D., Mechanics**: A Visual Approach,** Interactive Multimedia Courseware CD and Web site published by MSC Corporation, 2002.

Jensen, D. D., Basic **Finite Element Tutorials, 2nd ed.** published by MSC Corporation. Full hardcopy or CD available through MSCsoftware.com, 2002.

III.5 On Thesis Committee for:

Skiles, S.M., 2006, "Development of Principles and Facilitators for Transformational Product Design," Master of Science Thesis, The University of Texas at Austin, Austin, TX.

Singh, V., 2007, "Design for Transformation: Design Principles and Approach with Concept Generation Tools and Techniques," Master of Science Thesis, The University of Texas at Austin, Austin, TX.

Weaver, Jason, Transformer Design: Empirical Studies of Transformation Principles, Facilitators, and Functions, Masters Thesis, Univ. of Texas, Austin, TX, May 2008.

Walther, Nathan, Energy Systems in MAVs – Theoretical and Applied Perspectives, Masters Thesis, Univ. of Texas, Austin, TX, May 2008.

Wang, Dennis, Concept Generation Techniques to Support Design of Transforming Systems, Masters Thesis, Univ. of Texas, Austin, TX, Summer 2009.

Krager, Jarden, Understanding Innovation: A Study of Perspectives and Perceptions in Engineering, Masters Thesis, Univ. of Texas, Austin, TX, Summer 2009.

Pace, Patrick, Robotics for Cave / Tunnel Operations, Masters Thesis, Univ. of Texas, Austin, TX, Anticipated Summer 2011.

Camburn, Brad, Transformational Indicators, Masters Thesis, Univ. of Texas, Austin, TX, Summer 2011.

III.6. Industry Internal Reports and Non-refereed Papers

Jensen, D.D., "Grounding Methods for Reduction of Radio Frequency Interference from Printed Circuit Boards," *Texas Instruments Internal Report*, Mechanical Design Division, Lubbock, TX, 1983.

Stanley, G.M., Jensen, D.D., "The Computational Mechanics Testbed Element Theory Manual - Processor ES27," Lockheed Contract Report F333013, January, 1990.

Jensen, D.D., "Teaching Finite Elements Using the Software Package PATRAN, Advantages and Drawbacks," *Proceedings of the ASEE Pacific Southwest Annual Conf.*, Sacramento, CA, Oct., 1994.

Jensen, D., "Benchmarking Speeds on Cray Supercomputers for Static and Dynamic Structural Analysis Using ANSYS," *Lawrence Berkeley National Laboratories Consulting Report*, February, 1997.

Jensen, D., Borchert, R., "Myers Briggs Based Assessment of Hands-on and Visualization Usage in Mechanics Courses," *Proceedings of the Pikes Peak Educational Research Conference*, USAF Academy, CO, July, 1999.

Jensen, D., Feland, J., "A Simple Approach for Using Myers Briggs Type Indicator Data to Enhance Engineering Education," *Proceedings of the ASEE South West Regional Conference*, Golden, CO, March, 2000.

Self, B., Jensen, D., Bowe, M., Borchert, R. "Tech in Mech: Multimedia and Hands-on Projects for Learning Enhancement in Engineering Mechanics," Teaching with Technology Conference, Univ. of Colorado, July, 2000.

Self, B., Wood, J., Hansen, D., Jensen, D., and Solti, J., "Assessing Student Engagement in a Core Engineering Course", *Rocky Mountain Section Meeting of the American Society for Engineering Education*, April, 2005.

DelloIacono, B., Rodine, L., Szmerekovsky, A., Jensen, D., "The Use of Composites for Development of Prototypes in an Undergraduate Design Class", *Rocky Mountain Section Meeting of the American Society for Engineering Education*, US Air Force Academy, April, 2006.

Danielson, A., Becker, P., Erickson, S., Collins, C., Baldwin, G., Jensen, D., Szmerekovsky, A., "Innovative Methods to Mitigate Gust Effects on a Micro Air Vehicle", *Colorado Undergraduate Research Forum*, Univ. of Colorado at Colorado Springs, April, 2007.

Plummer, M., Swigonski, S., Groves, M., Vaughn, K., Quirarte, A., Yeager, C., Szmerekovsky, A., Jensen, D., "Using Transformation to Enhance Mission Effectiveness for Micro Air Vehicles", *Colorado Undergraduate Research Forum*, Univ. of Colorado at Colorado Springs, April, 2007.

Leetsma, P., Culver, R., Gurrola, C., Sparta, M., Zheng, D., Philpot, T., Jensen, D., Development of Next-Generation Ornithopter Prototypes. *Colorado Undergraduate Research Forum*, Colorado College, April, 2009.

Spitz, J., Brady, K., Galinis, J., Schuette, C., McNamera, B., Sobey, M., Jensen, D., MAVs that Can Perch & Hide in Plain Sight", *Colorado Undergraduate Research Forum*, Colorado College, April, 2009.

IV. GRANTS AND RESEARCH/CONSULTING FUNDING

(Note dollar amounts are either actual or in-kind values)

SUMMARY: over $7 million in research and consulting (much of this is collaborative) as of Jan 2023.

NASA Post Doctoral Position ($35,000) 1992 - 1993
Worked in the area of computational mechanics. Sponsored by the Center for Space Structures & Controls, University of Colorado, Boulder, CO.

NSF Sponsored Undergraduate Supercomputer Grant ($5000) 1994
Undergraduate use of the Cray 90 at San Diego Supercomputer facilities.

UOP School of Engineering Teaching Effectiveness Award ($1,500) 1994
Worked to maximize the effective use of computational teaching tools throughout the mechanics and design curriculum.

Eberhardt Research Fellowship ($3,500) 1995
Proposal title "Improved Computer Based Vibration Analysis". Pedagogical advancements in visualization of structural vibrations.

Microsoft Instructional Laboratory Award ($68,000) 1996
Software grant for curriculum development projects.

AutoDesk Design Curriculum Development Grant ($6,000) 1996
Educational grant from AutoCAD design systems.

Department of Energy Advanced Computational Resources Grant ($74,000) 1996
P.I. for National Energy Research Super Computer (NERSC) grant for finite element use at Lawrence Berkeley National Laboratory.

National Science Foundation Div. of Undergraduate Edu. ILI ($33,000) 1997
Integration of the data acquisition and control software LabVIEW into curriculumn providing increased understanding through hand-on & visualization.

Lawrence Berkeley National Laboratories ($10,000) 1997
Develop and teach new content for visually based finite element modeling.

National Science Foundation Div. of Undergraduate Edu. ILI ($22,000) 1997
Use of visualization modules and photoelasticity to increase students learning in mechanics courses.

Air Force Office of Scientific Research ($2,000) 1998
Develop visualization modules for stress concepts for mechanics courses.

Institute for Information and Technology Applications ($3,000) 1999
Computer resources to use in development of learning modules for use in mechanics.

MSC Software Corp. ($3,000) 1999
Software development grant for tools to aid in NSF work in the area of interactive educational multimedia.

MSC Software Corp. ($20,000) 1999
Software development grant for development of interactive educational multimedia.

Air Force Office of Scientific Research ($2000) 1999/2000
Funding for development and dissemination of assessment of multimedia and design team formulation strategies.

Air Force Office of Scientific Research ($5,000) 2000
Materials and research travel funds for design of compliant mechanisms.

Institute for Information and Technology Applictions ($3000), 1999/2000
Research in Multimedia's Effect on Mechanics Education.

Air Force Office of Scientific Research ($3000), 1999/2000.
Software funds for material selection and statistical analysis for design of compliant mechanisms which are used as hands-on devices in the classroom.

Institute for Information and Technology Applictions ($1200), 2000/2001
Research in Multimedia's Effect on Mechanics Education.

Air Force Office of Scientific Research ($4000), 2000/2001.
For material selection and statistical analysis for design of compliant mechanisms which are used as hands-on devices in the classroom.

Dean of the Faculty Assessment Grant ($1100) 2000/2001
For presentation of assessment of multimedia in education.

MSC Software Corp. ($30,000) 1999-2001
Software development grant for refinement of interactive educational multimedia based on Finite Element Analysis.

Institute for Information and Technology Applictions ($6,500) 2001
Revisions and dissemination of Interactive Multimedia for Mechanics Education.

Dean of the Faculty Assessment Grant ($3000) 2001/2002
For development of multimedia to enhance engineering mechanics.

Institute for Information and Technology Applictions ($3,000) 2001/2002
Present Interactive Multimedia results and initiate "PDA in Design" study.

Air Force Office of Scientific Research (CASTlE Research Center) ($1,000) 2002
Materials and research travel funds for design of compliant mechanisms.

Dean of the Faculty Assessment Grant ($5000) 2002/2003
For presentation of assessment of combined hands-on & multimedia in education.

Wiley Publishers Development Grant ($3,000) 2002
For development of hands-on & multimedia for Mechanics of Materials. .

Institute for Information and Technology Applictions ($3,000) 2002/2003
Educuse educational technology for development of active learning strategies

Air Force Acquisitions Grant Program (With Major K. Bearden) ($43,000) 2003
Rapid Prototyping Machine for use in Education and Design Research

Dean of the Faculty Assessment Grant ($2500) 2003/2004
For development of multimedia in Machine Design

NSF Division of Undergraduate Education (with Univ. of Texas) ($277,000) 2005-2006
Development and assessment of active learning for Mechanics of Materials.

AFRL/MN (Eglin AFB) (with Univ. of Texas) ($85,000) 2005-2006
Development of techniques for enhancement of small UAVs

Dean of the Faculty Assessment Grant ($2000) 2004/2005
For development of multimedia in Mechanics

Air Force Office of Scientific Research ($4,000) 2005
Development of Design Methodologies for UAV enhancement

Dean of the Faculty Assessment Grant ($6000) 2006
For cadet work on UAV technology

NSF Division of Undergraduate Education (with Univ. of the Pacific) ($125,000) 2006-2008
Development and assessment of tutorials for Finite Element Analysis.

IITA Grant ($10,000) 2005/2006
Development of Enhanced Multimedia for Engineering Mechanics Education

AFRL/MN (Eglin AFB) (with Univ. of Texas) ($90,000) 2006-2007
Development of techniques for enhancement of small UAVs

NSF Division of Engineering Research (with Univ. of Texas, and Texas A & M) ($310,000) 2006-2008
Development and assessment design methods to increase flexibility.

Air Force Office of Scientific Research ($7,000) 2007
Development of Design Methodologies for UAV enhancement

AFRL/MN (Eglin AFB) (with Univ. of Texas) ($65,000) 2007-2008
Development of techniques for enhancement of small UAVs

Dean of the Faculty Assessment Grant ($4000) 2008
For cadet work on UAV technology

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($42,000) 2007
Commander's Challenge Design Training

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($9,000) 2007
University Competition – Mentorship in Design

AFRL/HQ (Wright Patterson AFB) ($45,000) 2008
Service Academy Design Competition

AFRL/RB Wright Patterson AFB) ($50,000) 2008
Stealth, Perching MAV Design, Ornithopter Mechanism Design

AFRL/RXQ (Tyndall AFB) (with Univ. of Texas) ($35,000) 2008-2009
Development of robotics solutions for cave and tunnel scenarios

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2008-2009
Development of techniques for enhancement of small UAVs

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($42,000) 2008
Commander's Challenge Design Training

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2009-2010
Development of techniques for enhancement of small UAVs

AFRL/HQ (Wright Patterson AFB) ($45,000) 2009
Service Academy Design Competition

DTRA (with Univ. of Texas) ($40,000) 2009-2010
Development of robotics solutions for cave and tunnel scenarios

AFRL/RXQ (Tyndall AFB) (with Univ. of Texas) ($35,000) 2009-2010
Development of Robotics Solutions for Cave and Tunnel Scenarios

AFRL/RB Wright Patterson AFB) ($25,000) 2009-2010
Stealth, Perching MAV Design, Ornithopter Mechanism Design

NIST ($10,000) 2009-2010
Development of Energy Harvesting Solutions for Bridges, Aircraft and Personal Applications

OSD Office of Corrosion Policy ($45,000) 2009-2010
Energy Harvesting for Bridge Structural Health Monitoring Systems

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($46,000) 2009
Commander's Challenge Training in Innovative Product Prototype Development

NSF Div. of Undergrad Ed. (w/ Univ. of the Pacific & Univ. of Texas) ($600,000) 2010-2012
Development and Assessment of Finite Element Based Active Learning Modules.

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($46,000) 2010
Commander's Challenge Design Training

AFRL/HQ (Wright Patterson AFB) ($45,000) 2010
Service Academy Design Competition

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($130,000) 2010-2011
Development of techniques for enhancement of small UAVs

DTRA (with Univ. of Texas) ($40,000) 2010-2011
Development of robotics solutions for cave and tunnel scenarios

AFRL/RXQ (Tyndall AFB) (with Univ. of Texas) ($30,000) 2010-2011
Development of Robotics 30Solutions for Cave and Tunnel Scenarios
50
AFRL/RB Wright Patterson AFB) ($50,000) 2010-2011
Stealth, Perching MAV Design, Ornithopter Mechanism Design

AFRL/HQ (Wright Patterson AFB) ($45,000) 2011
Service Academy Design Competition

NIST ($10,000) 2010-2011
Development of Energy Harvesting Solutions for Bridges, Aircraft and Personal Applications

OSD Office of Corrosion Policy ($60,000) 2010-2011
Energy Harvesting for Bridge Structural Health Monitoring Systems

OSD Joint Ground Robotics Enterprise ($40,000) 2010-2011
Energy Harvesting for Bridge Structural Health Monitoring Systems

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($46,000) 2011
Commander's Challenge Training in Innovative Product Prototype Development

AFRL/RB Wright Patterson AFB) ($50,000) 2011-2012
Stealth, Perching MAV Design, Ornithopter Mechanism Design

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2011-2012
Development of techniques for enhancement of small UAVs

OSD Office of Corrosion Policy ($60,000) 2011-20112
Energy Harvesting for Bridge Structural Health Monitoring Systems

AFRL/HQ (Wright Patterson AFB) ($45,000) 2012
Service Academy Design Competition

DTRA (with Univ. of Texas) ($40,000) 2011-2012

Development of robotics solutions for cave and tunnel scenarios

AFRL/HQ (Wright Patterson AFB) (with Univ. of Texas) ($46,000) 2012
Commander's Challenge Training in Innovative Product Prototype Development

OSD Joint Ground Robotics Enterprise ($50,000) 2012-2013
Energy Harvesting for Bridge Structural Health Monitoring Systems

AFRL/HQ (Wright Patterson AFB) ($47,000) 2012
Service Academy Design Competition – Chasm Spanning System

DTRA (with Univ. of Texas) ($50,000) 2011-2012
Development of robotics solutions for cave and tunnel scenarios

Advanced Research Associates (ARA) ($15,000) 2012-2013
Development of modeling methods for explosive survivability

Air Force Medical Evaluation Support Activity (AFMESA) ($65,000) 2012 – 2013
Development of enhancements to the Patient Loading System

OSD Office of Corrosion Policy ($30,000) 2012-2013
Energy Harvesting for Bridge Structural Health Monitoring Systems

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2012-2013
Development of techniques for enhancement of small UAVs used to mitigate hard deeply buried target-based threats

DTRA (with Univ. of Texas) ($50,000) 2012-2013
Development of robotics and quad rotor systems for ISR

AFRL/HQ (Wright Patterson AFB) ($47,000) 2013-2014
Service Academy Design Competition – Heavy Lift System

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2013-2014
Design of Composable and Fractionable UAS

DTRA (with Univ. of Texas) ($50,000) 2013-2014
Development of transforming robotics and quad rotor systems

OSD Office of Corrosion Policy ($55,000) 2013-2014
Energy Harvesting and Corrosion Monitoring Systems

DARPA ($62,000) 2013-2014
Innovation Competition

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($110,000) 2013-2014
Development of techniques for enhancement and transformation of small robots and UASs

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($50,000) 2013-2014

Development of Modularity Metrics for use in Flexible Systems

AFRL/HQ (Wright Patterson AFB) ($39,900) 2014-2015
Service Academy Design Competition – Special Operation Troops Personal Cooling System

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2014-2015 (Pending)
Design of Functional Models and Prototypes for Composable and Fractionable UAS. Development of Strategies for Mitigating Capabilities for Maritime Vessels .

OSD Office of Corrosion Policy ($55,000) 2014-2015
Energy Harvesting and Corrosion Prevention and Monitoring Systems

DARPA ($50,000) 2014-2015
Innovation Competition

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2014-2015 (Pending)
Development of Functional Models and Strategies for Defeating Hard Deeply Buried Targets. Development of Strategies, Models and Prototypes for Replacement of Land Mine Capabilities.

OSD Office of Corrosion Policy ($54,000) 2015-20156
Innovation in Corrosion Prevention and Monitoring Systems

DARPA ($60,000) 2015-20156
Innovation Competition

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($70,000) 2015-2016
Redesign of advanced fighter weapons bay

AFRL/RW (Eglin AFB) (with Univ. of Texas) ($65,000) 2015-2016
Development of Functional Strategies for Defeating Hard Deeply Buried Targets. Development of Strategies, Models and Prototypes for Aircraft Runway Damage Assessment.

Joint Improvised Defeat Agency (JIDA) ($65,000) (2016-2017)
Innovation in Counter UAS Methods

Spectranetics Corp. (16,000) (2015-2016)
Methods for using Lasers in Conjunction with Mechanical Devices for Mitigating Total Occlusions in Arteries.

Spectranetics Corp. (20,000) (2016-2017)
Methods for Detecting and Assessing Total Occlusions in Arteries.

AFRL/RV ($42,000) (2015-2016)
Service Academy Challenge – Redesign of the Fast Roping System

AFRL/RV Singapore – U.S. Tactical All-Inclusive Navigation (SYSTAIN) Collaboration ($114,000) (2015-2016)
Methods for GPS Degreded or Denied Navigation

Autodesk Corp. ($50,000) (2015-2016)
Additive Manufacturing to Enhance Special Operations Capabilities

Internatiomnal Design Center – Singapore ($15,000) (2015)
Research Fellowship in Design Methodology

Internatiomnal Design Center – Singapore ($15,000) (2016)
Research Fellowship in Design Methodology

Singapore Univ. of Tech. & Design($60,000) (2017)
Biologically Inspired Development of Unmanned ISR Systems with Transformational Capsbility

AFRL/RV ($49,000) (2016-2017)
Service Academy Challenge – Systems to aid Special Ops moving equipment over rough terrain

AFRL/RW (Eglin AFB) ($65,000) 2016-2017
Development of Functional Strategies for Defeating Hard Deeply Buried Targets. Development of Strategies, Models and Prototypes for creating Even Distribution of Frag Patterns from Forward Seeking Munitions

AFCEC (Tyndall AFB) ($132,000) 2016-2017
Development of Methods and Tech to Increase EOD Effectiveness using Additive Manf. Methods.

OSD Office of Corrosion Policy ($30,000) 2016-2017
Innovation in Corrosion Prevention and Monitoring Systems

AFRL/RQ ($50,000) 2016-2017
Development of Innovative Launch and Recovery Systems for Low Cost Attritable Aircraft Technology (LCAAT)

Engineering Research Design Center (ERDC) (Vicksburg, MS) ($50,000) 2016-2017
Assessment of the ERS Software for Use by Cadets Working on the LCAAT System

International Design Center – Singapore ($47,000) (2017)
Research Fellowship in Design Methodology

Singapore Univ. of Technology and Design Academy – ($30,000) (2017)
Design Innovation

AFRL/RW (Eglin AFB) ($100,000) 2017-2018
Development of Innovation for Munitions Technology

NASA through Made in Space ($50,000) (2017)
Zero Gravity Structural Joints Using Additive Manufacturing.

Engineering Research Design Center (ERDC) (Vicksburg, MS) ($50,000) 2017-2018
Assessment of the ERS Software for Use by Cadets Working on the IED Mitigation System

JIDO (Wash DC), ($65,000) 2017-2018

Tech and Con-Ops for Culvert IEDs

OSD Office of Corrosion Policy ($26,000) 2017-2018
Innovation in Corrosion Investigation Systems

Institute Information Technology Applications ($29,000) 2017-2018
Use of Creativity Enhancers for Development of Technology for Hardened and Deeply Buried Targets.

International Design Center – Singapore Univ. ofTech & Design-MIT ($50,000) 2018
Research Fellowship in Design Methodology

Wright Brothers Institute ($3,000) 2018
Human – Machine Teaming Workshop.

AFRL Weapons Directorate, ($15,000) 2019
Innovation in Air Defense

AFRL Weapons Directorate ($15,000) 2019
Creativity Infused into Air Defense Scenarios

Joint Base Andrews AFB, Wash. D.C., ($20,000) 2019
Innovation in Design of AF Services

AFRL Human Performance Directorate, Dayton, ($20,000) 2019
Design of Innovative Security Systems,

AFRL Headquarters, Dayton OH, ($40,000), 2019
Innovation in the Commander's Challenge
Scott AFB, St Louis, MO, ($20,000) 2019
Innovation in Products and Services for the Air Force

AFRL Air Vehicles, Arnold AFB, TN ($20,000) 2019
Innovation in Design of Products and Testing Processes

Eurica Research Funding, Univ. of CO - Denver ($5,000) (with Wood and LeFuente) 2020
Innovation and Design for Additive Manufacturing

Philips Medical, Colorado Springs, CO, ($15,000) 2020
Innovation in Design of Medical Products

Fletcher Jones Foundation, ($475,000) (Westmont College Grant - Jensen as contributor) 2020
Engineering Design and Innovation Facilities

Edwards AFB, CA ($24,000) Nov 2020

Innovation in Testing and Product Development

Air Force Research Labs, Wright Patterson AFB, OH ($24,500) Feb 2021
Design Innovation Training

Edwards AFB, CA ($24,250) Jan 2021
Innovation in Testing and Product Development

MERICOS Foundation, ($300,000) (Westmont College Grant - Jensen as contributor) 2021
Engineering Design and Innovation Facilities

Edwards AFB, CA, ($23,000) Sept. 2021
Obtaining SME input to transform culture and climate.

AFRL Sensors Workshop – Removing barriers to Innovation ($1,500) 2021
Invited to be a part of a panel of innovation experts

AFRL Consulting – TALOS security project ($6,000) Sept 2021

Dolittle Institute – Innovation Discovery Event for Palsmonic / Photonic Gas Sensing, ($5,000), Nov 2021

Private Funding ($15,000) May 2022
Design of STEM Educational Experiences for Low Resource Cultures

AFRL-RQ (30,000) June 2022
Digitial vs. Physical Prototyping Research

AFRL Digital Transformation Office, (funding in negociation) 2023
Innovation in the transformational process

AFRL-RQ (30,000) May 2023
Research in Digitial vs. Physical Prototyping

Northrop Grumman ($15,000) March 2022
Edge of Space design project

Special Technology Labs [US Dept. of Energy] ($15,000) April 2023
Energy Harvesting for Drones

Private Funding ($15,000) May 2023
Design of STEM Educational Experiences for Low Resource Cultures

Northrop Grumman ($15,000) Sept 2023
Edge of Space design project Phase II

Air Force Research Labs through Infoscitech Corp. ($15,000) Sept 2023
Development of enhanced peripheral nerve electrical stimulation device

Private Funding ($20,000) May 2024
Phase II- Design of STEM Educational Experiences for Low Resource Cultures

Expert Witness Work ($3,000) July 2023,
Development of litigation technical plan for after market auto parts

AFRL Human Performance Directorate, ($15,000) 2024
Design of Wearable Devices to Enhance Human Performance

Johnston Endowment for Engineering Excellence ($1.5 M)
Through Westmont's Office of College Advancement

Air Force Reseaqrch Lab Commander's Challenge ($20,000) Summer 2025
Mitigation of threats from fiber optic drones

Private Funding ($20,000) May 2025
Phase III- Design of STEM Educational Experiences for Low Resource Cultures

Allder Endowed Chair in Science and Technology ($1 M) Novemebr 2024.
Through Westmont Office of College Advancement

Northrop Grumman ($15,000) Sept 2024
Edge of Space design project Phase III

Northrop Grumman ($15,000) (in process) Sept 2025
Reenergizing Underwater Drones

Dept. of Energy Special Techniology Lab (in process) ($25,000) Oct 2025
Optimization of Novel Air Sensing System

Mission Darkness Corp ($15,000) Aug 2025,
Blocking electronic signals for mitagation of drone threats

V. AWARDS and HONORS

NASA Post Doctoral Position, 1992.

UOP School of Engineering Teaching Effectiveness Award, 1994.

Best paper award for Mechanical Engineering Session at ASEE Annual Conference, June 1998. Paper titled "Evaluation and Refinement of a Restructured Introduction to Engineering Design Course Using Student Surveys and MBTI Data".

Outstanding Academy Educator Award, US Air Force Academy, May 2000.

American Society of Mechanical Engineering (ASME) Award for "Most Innovative Curriculum", 1999-2000.

US Air Force Academy's Engineering Division nominee for the Engineering Division, "The Ernest L. Boyer - International Award for Excellence in Teaching, Learning and Technology", Nov 2000.

US Air Force Academy Department of Engineering Mechanics "Instructor of the Year – 300 Level Courses" for the year 2000 – 2001.

Multimedia Courseware Vis-MoM (by Jensen, Wood & Dimas) was selected as a finalist for the Premier Award in Engineering Courseware 2001. This award is given annually to recognize the best non-commercial engineering courseware developed during that year. This honor includes the benefit of having our software distributed to over 2000 individuals for use in their classes.

Appointed as Adjunct Professor at University of Texas, Austin, Sept 2001.

Nominated for the ASEE Outstanding Teacher Award in the West/Central Region, 2002.

ASME DTEC paper on "Transformational Design Principles" nominated for Best Paper, this is a top 4/92 papers submitted, Oct 2006.

Dean of the Faculty Outstanding Civilian of the Quarter, Oct – Dec 2006.

Dean of the Faculty, Outstanding Civilian of the Year, 2006.

US Air Force Academy nominee for "The Ernest L. Boyer - International Award for Excellence in Teaching, Learning and Technology", Dec 2007.

"The Ernest L. Boyer - International Award for Excellence in Teaching, Learning and Technology", Dec 2007.

Best presentation in session award, ASEE Annual Conference, 2005.

Session 1168 - Improving Mechanics of Materials, Enhancing Machine Design Courses Through Use of a Multimedia-Based Review of Mechanics of Materials, *John Wood, Dan Jensen and Kris Wood, USAF Academy*

Best presentation in session award, ASEE Annual Conference, 2007.
Session 1368 – What's New in Mechanics of Materials?, From Tootsie Rolls to Composites: Assessing a Spectrum of Active Learning Activities in Engineering Mechanics, *Julie Linsey, University of Texas-Austin; Austin Talley, University of Texas - Austin; Daniel Jensen, U.S. Air Force Academy; Kristin Wood, University of Texas-Austin; Kathy Schmidt, University of Texas-Austin; Rachel Kuhr, University of Texas-Austin; Saad Eways, Austin Community College*

Nominated for Best Paper Award, ASEE Annual Conference Mechanical Engineering Division, 2008. - Brown, A., Rencis, J., Jensen, D., Chaun-Chang, C., Essam, I., Schimpf, P., "Finite Element Learning Modules for Undergraduate Engineering Topics Using Commercial Software", *Proceedings of 2008 ASEE Annual Conference,* Pittsburg, PN , June, 2008.

Senior Faculty Teaching Award, Fall 2010, Awarded by DFEM Faculty.

Seiler Research Award for Most Accomplished Engineering Researcher at the US Air Force Academy, 2010.

One of two nominees from the US Air Force Academy to the CASE Foundation for the Colorado Professor of the Year Award, 2011.

Engineering Division Nominee from the US Air Force Academy to the CASE Foundation for the Colorado Professor of the Year Award, 2014.

USAF Academy Nominee for USAF Outstanding Science and Engineering Educator Award, 2015.

Nominee from the US Air Force Academy to the CASE Foundation for the Colorado Professor of the Year Award, 2016.

Elected as "Fellow of the International Design Center", 2015-2017.

Most Innovative Research Award, Science of Teaching and Learning Conference Poster Session 1. Creativity Exercises to Enhance Innovation in Engineering Cadets, Lt Col Mike Anderson, Dr. Gayle Yamazaki, Dr. Dan Jensen, Lt Col Rich Shertzer, Lt Col Cory Cooper, Capt Kaz Teope, Oct 2017.

Elected as "Senior Fellow" of the International Design Center, Singapore Univ. of Technology & Design an MIT, 2018-2019.

Appointed as Teaching Professor, Singapore Univ. of Technology & Design Academy, 2018.

Lewis Design Award – Univ. of Colorado – Denver Capstone Deasing team, Covid 19 Capstone team working on the "Clean Desk" project May 2021.

Allder Endowed Chair in Science and Technology, Westmont College, Novemebr 2024.

VI. PROFESSIONAL SERVICE

Active member of American Society of Mechanical Engineers (ASME) and American Society for Engineering Education (ASEE), current.

Nominated to Membership of Sigma Xi – The Scientific Research Honor Society, 2023

Review papers for ASME and ASEE (both hconferences and journals), 1997-present

Associate staff with AF Chaplain's Spire sponsored group Campus Crusade for Christ, 1997-2021.

Session Chair, ASEE Mechanics Division, ASEE Annual Conference, St. Louis, June 2000.

Elected, Member at Large, Executive Committee of the Mechanics Division of ASEE, June 2001.

On the thesis committee for John Wood, Candidate for the Ph.D. in Mechanical Engineering at the Colorado State University, Ft. Collins, CO, completion date May 2002.

On the thesis committee for Monty Greer, candidate for the Ph.D. in Mechanical Engineering at the University of Texas, Austin, completion date May 2002.

Reviewer for Journals/Conferences: Journal of Engineering Education, Proceeding of the ASME International Congress (Design for Manufacturing Section), Proceedings of the ASEE Annual Conference (Mechanics Division), Proceedings of the ASEE Annual Conference (Design Division), Proceedings of the ASME Design Theroy and Methodology Conference.

Reviewer for Publishing Companies: Wiley Publishers (Mechanics of Materials textbook by Boresi), Wiley Publishers (Mechanics of Materials textbook by Sturges et. Al., Prentice Hall Publishers (Design textbook by Otto & Wood), McGraw-Hill Publishers (Finite Element book by Hutton).

Engineering Consultant: MSC Software Corp. 1) Development of Multimedia for Mechanics of Materials. 2) Development of Instructional Material for Finite Element Analysis.

Department of Engineering Mechanics "Faculty Development Officer", 2000 – present.

Session Chair, ASME Design Engineering Technical Conference, Oct., 2006.

Advisory Board for the Institute for Information Technology Applications (IITA) at the US Air Force Academy, 2003 – 2007.

On the thesis committee for Stewart Skiles, candidate for the Masters in Mechanical Engineering at the University of Texas, Austin, completion date May 2006.

On the thesis committee for Jeremy Murphy, candidate for the Ph.D. in Mechanical Engineering at the University of Texas, Austin, anticipated completion date May 2007.

On the thesis committee for Vik Singh, candidate for the Masters in Mechanical Engineering at the University of Texas, Austin, date Dec 2007.

On the thesis committee for Jason Weaver, candidate for the Masters in Mechanical Engineering at the University of Texas, Austin, completion date June 2007.

On the thesis committee for Nathan Putnam, candidate for the Masters in Mechanical Engineering at the University of Texas, Austin, completion date July 2008.

On the thesis committee for Brandon Walther, candidate for the Masters in Mechanical Engineering at the University of Texas, Austin, completion date July 2008.

On the thesis committee for Jeremy Murphy, candidate for the Ph.D. in Mechanical Engineering at the University of Texas, Austin, completion date Aug 2011.

Review Coordinator for the ASME Design Theory and Methodology Conference, Las Vegas, Sept 2007.

Organization & Review team for the "Lone Star Challenge" – a UAS Competition between Univ. of Texas and Texas A&M sponsored by AFRL'sRapid Response Team, Spring 2008.

Session Chair, ASME Design Engineering Technical Conference, Oct., 2007.

Reviewer for ASEE Mechanical Engineering Division – Annual Conference, Pittsburg, June 2008.

Session Chair, ASME Design Engineering Technical Conference, Oct., 2008.

Mentor for Air Force Research Lab Commander's Challenge Team at Kirtland Air Force Base, 2007.

Mentor for Air Force Research Lab Commander's Challenge Team at Kirtland Air Force Base, 2008.

Mentor for Air Force Research Lab Commander's Challenge Team at Wright Patterson Air Force Base, 2008.

Mentor for Air Force Research Lab Commander's Challenge Team at Wright Patterson Air Force Base, 2009.

Mentor for Air Force Research Lab Commander's Challenge Team at Eglin Air Force Base, 2010.

Mentor for Air Force Research Lab Commander's Challenge Team at Eglin Air Force Base, 2011.

Reviewer for International Journal of Mass Customisation (IJMassC), 2012

Reviewer for ASME International Design Engineering Technical Conferences, 2012

Reviewer for ASEE Annual conference, 2012.

Session Coordinater for International ASME Design Conference. 2015- 2017.

Review papers for ASME Journal of Mechanical Design 2000- present.

Review papers for ASME Internatioanl Design Engineering Technical Conferences. 2000- present.

Mentor for Air Force Research Lab Commander's Challenge Team at Wright Patterson Air Force Base, 2010- 2019.

Mentor for Air Force Research Lab Commander's Challenge Team at Kirtland Air Force Base, 2009-2017.

Air Force Research Labs IDEATE team – assist with innovation projects and training, Wright Patterson AFB, OH, 2019 – 2023.

Mentor for Air Force Research Lab Commander's Challenge Team at Eglin Air Force Base, 2010-2019.

Secretary (minute taker) for Faculty meetings for Westmont College, 2022-2023

Review Papers for ASEE 2000- present.

Academic Recourses Committee for Westmont College , 2023-present

WASC Westmont Accreditation Committee , 2024 - present