

EDUCATION

- Ph.D. May, 1995, University of Rhode Island, Kingston, RI
Major: Mechanical Engineering and Applied Mechanics
Thesis: "A Study of the Dynamic Mechanical Behavior of Elastomeric Materials Under Impact Loading"
- M.S. May, 1990, University of Rhode Island, Kingston, RI
Major: Mechanical Engineering and Applied Mechanics
Thesis: "A Study of the Effect of Geometry on the Mechanical Behavior of an Epichlorohydrin Elastomer Used as an Impact Absorber in Pneumatic Fastening Tools"
- B.S. May, 1985, University of Rhode Island, Kingston, RI
Major: Mechanical Engineering

ACADEMIC EXPERIENCE

Western New England University, Springfield, MA (August 2002 to present)

Chair, Department of Mechanical Engineering (July 2022 to present)

- Advises Dean as to staffing and other resource needs that are required for the effective delivery of the academic programs of the department. Successfully recruited five new faculty to the mechanical engineering department.
- Oversees the work of the faculty of the department (full-time, part-time, on-campus, and summer college) in courses, programs, majors, and the overall curriculum.
- In conjunction with the Dean's Office, schedules classes during Fall, Spring, and Summer semesters both on-campus and off-campus, day and evening, and assigns instructional duties to provide maximum strength in the curriculum.
- Evaluates departmental personnel. Writes formative and/or summative evaluations and rates the performance of each full-time faculty member of the Department except for Professional Educators (Professors of Practice) in the Department who have another immediate supervisor. Evaluations highlight faculty members strengths and areas that need improvement in accordance with the Criteria for Evaluation in the WNE Faculty Handbook.
- Assists the Dean in preparing and administering the budget (including preparation of grant proposals), and in allocating resources in the most effective way.
- Represents the Department to other units of the University, promotes the Department to prospective students, and coordinates faculty involvement in admission processes including active recruitment, open houses, and career days.
- Strives to improve the teaching performance, governance/University service/advising, and professional development, and scholarship of faculty in the department.
- Sets annual departmental goals and objectives, including curricular and program development. Reviews and updates the catalogue regularly.
- Ensures that the programs of the department meet the professional accreditation standards and provides the faculty with guidance and support in meeting the performance criteria of the program. Leads the accreditation effort and coordinates the preparation of documents to meet these objectives.
- Works with other colleges and departments in the University with respect to staffing, scheduling, and the coordination of academic offerings across the University.

Associate Professor of Mechanical Engineering (August 2002 to June 2022)

- Responsible for development of a curriculum of instruction for courses in solid mechanics, mechanical vibrations, materials science, mechanical design, experimental methods and New Product Development.
- Co-developed a Product Innovation and Development Center with the Colleges of Business and Law to secure corporate funding for the development of innovative new products, promote entrepreneurship, and commercialize student inventions.
- Obtained corporate sponsorship for over 40 senior projects and filed 6 utility and 9 provisional patents for product innovations.

- Served as Director of the Mechanical Testing Lab responsible for bringing state of the art experimental capabilities to the solid mechanics lab in the Mechanical Engineering department, thus providing capabilities for research in the areas of static and dynamic material behavior of elastomers and solids under high strain rates.
- Mechanical Engineering faculty advisor for more than 10 interdisciplinary team projects.
- Received the one of the highest teaching evaluation ratings from students in the School of Engineering over the past five years (4.6/5.0).
- Served as faculty liaison to the Mechanical Engineering Industrial Advisory Council.
- Secured resources from corporations for laboratory equipment totaling over \$35,000.
- Developed the biodiesel generation facility for sustainability at Western New England University.
- Coordinator for the approval of University Patent Filings for the College of Engineering.

Courses Taught:

Graduate Level: ME-619 Analytical and Experimental Stress Analysis*

Senior Level: ME-425 Design of Machine Elements

ME-490 Mechanical Engineering Product Innovation and Development*

- ME-423/BME-423/BUS 423 – Product Innovation and Development*

ME-435 Senior Interdisciplinary Laboratory Project (Hybrid Electric Car)

ME-427 Kinematics and Control of Electro-Mechanical Systems

Junior Level: ME-320 Mechanical Vibrations

ME-312 Kinematics

ME-309 Materials Science

ME-314 Junior Interdisciplinary Laboratory Project (Product Innovation)*

Sophomore Level: ME-202 Statics

ME-203 Dynamics

ME-204/205 – Engineering Mechanics I and II

ME-208 Mechanics of Materials

Freshman Level: ENGR-110 Computer Applications in Engineering (Labview, Matlab, MathCAD, Excel)

* course developed by Glenn Vallee

University of Rhode Island, Kingston, RI (September 1990 to January, 1998)

Adjunct Assistant Professor

- Responsible for development of a curriculum for instruction of senior level *Mechanical Systems Design* (Machine Design) and *Introduction to the Finite Element Method* courses, as well as the entry level *Basic Graphics* courses. Frequently incorporate real world, practical design projects into the curriculum.
- Member of the Industrial Advisory Board for the Department of Mechanical Engineering and Applied Mechanics.

Courses Taught at Other Institutions:

Community College of Rhode Island, Warwick, RI

Mechanics of Materials, Dynamics, Statics, Mechanical Engineering Laboratory, Machine Design

New England Institute of Technology, Warwick, RI

Engineering Economics, Electromechanical Devices, Engineering Materials

PROFESSIONAL EXPERIENCE

Remington Products Company, L.L.C., Bridgeport, CT (September 1997 to August 2002)

Director of Engineering and Quality Assurance, Worldwide

Directed activities of Design and Product Engineering, Quality Assurance and Manufacturing departments in the U.S., U.K. and Asia responsible for the design and development of international consumer products. Responsible for focusing new product engineering toward continuously improving customer satisfaction through improved product design, performance and quality.

- Co-authored the corporate New Product Development (NPD) process geared toward the design of electromechanical products having the highest quality which met or exceed consumer expectations. Integrated Computer Aided Engineering (CAE), Quality Assurance and consumer feedback into the design and development of international consumer products.
- Supervised the corporate laboratories (US and Hong Kong) and brought them up to UL, CSA and Demko regulatory standards. Responsible for developing all test protocols and methodologies for new product testing and

qualification. Introduced electronic instrumentation techniques into the product qualification process, including strain gage techniques, photoelastic stress analysis, a variety of dynamic test methods and high-speed data acquisition and control. Responsible for supervising failure analysis of products involved in product liability litigation.

- Helped introduce solid modeling (Pro/E) and rapid prototyping to an engineering department which previously designed products using only 2D CAD (CADKey and AutoCAD). Integrated (and performed) Finite Element Analysis (FEA), Design of Experiments (DOE), Failure Mode and Effects Analysis (FMEA) and formal design reviews into the NPD process.
- Introduced modern Quality Assurance techniques into the company and brought the US factory to CGMP standards. Reorganized the entire QA department and all quality systems (including the Bridgeport manufacturing facility) to improve effectiveness. Integrated QA into the NPD process and directed input from QA, returned product analysis and consumer feedback into improved products, resulting in a 35% drop in product returns over three years.
- Helped create QA offices in both Hong Kong and mainland China in order to implement much of the QA function at supplier location, resulting in improved communications and more efficient corrective actions and lot dispositions. Reduced inspection costs by over 50% while reducing manufacturing defects by nearly 20%.
- Directed all corporate research activities with local Universities in order to incorporate new technologies into new products. Projects included the development of new surface finishes and cutting materials for shaving/hair trimming applications, and advanced thermal analyses in paraffin spas.
- Managed and provided leadership to business process improvement teams aimed at improving corporate processes and efficiencies. Analyzed data including trends, historical records, customer needs, cost of quality analysis and competitive intelligence while working with all levels and functions. Responsible for presenting quarterly reports to senior management on NPD activities Quality initiatives.
- Created and programmed an electronic engineering documentation system, replacing the previous paper system and streamlining information flow. Developed an international product performance database, enabling the sharing engineering documentation, test data, product returns data and customer feedback within the worldwide organization via the internet.

Stanley-Bostitch Company, East Greenwich, RI (October 1985 to September 1997)

Manager, Engineering Laboratories (June, 1995 to September, 1997)

Responsible for managing the largest Engineering Laboratory in the Stanley Works, supervising 18 employees. Coordinated testing and allocated resources to meet stringent scheduling requirements of Product Development, Manufacturing and Marketing departments.

- Developed and implemented standard test batteries and comprehensive test methods for all product testing.
- Introduced and programmed high speed data acquisition and control systems, increasing productivity by over 50%, while providing support to new product development and existing product lines.
- Coordinated physical expansion of laboratory by 40% to support testing of all new and existing products. Responsible for performing periodic quality audits on all major products.
- Coordinated research efforts as required to solve a wide range of design and manufacturing problems throughout the company.
- Principal Finite Element Analyst for company, and technical liaison to international segments of the corporation responsible for coordinating adherence to international safety standards.
- Company representative and technical expert in product liability litigation.

Product Design/Development Engineer (August 1987 to June 1995)

Responsible for guiding product development from concept through production in a highly competitive manufacturing environment. Extensive design and analysis experience using Unigraphics and AutoCAD CAD/CAM software and ABAQUS and ANSYS FEA software.

Test Engineer (August 1986 to August 1987)

Directed and conducted activities in the engineering lab to evaluate product performance. Extensive work in the areas of vibration testing and experimental stress analysis utilizing photo elastic coatings and strain gauge technology.

Technician (October 1985 to August 1986)

Conducted a wide range of testing in the engineering lab to evaluate product performance. Extensive work using a variety electronic transducers and signal conditioning devices.

RESEARCH AREAS OF INTEREST

- Dynamic mechanical behavior of materials using experimental and Finite Element techniques
- Static and dynamic mechanical behavior of elastomeric materials
- Experimental verification techniques for Finite Element Analysis
- Finite Element Analysis and applications to design
- New product development process and methods used to reduce time to market as related to consumer and industrial products
- Unique methodologies for experimentally determining performance of consumer products and assessing consumer satisfaction.

PROFESSIONAL ACTIVITIES

Professional Societies

American Society of Mechanical Engineers
Tau Beta Pi Engineering Honor Society, Rhode Island Chapter
Pi Tau Sigma Engineering Honor Society, Rhode Island Chapter

CONSULTING

Patent Litigation – Technical Expert

Adduci, Mastriani & Schaumberg LLP, Washington, DC.

- Served as technical expert in an ITC patent non-infringement investigation related to **vaping devices (e-cigarettes)**, 2019.

Brooks Cushman P.C., Southfield, MI.

- Provided expert declarations and deposition testimony in patent infringement litigation related to **beveling miter saws**, 2022.

Carlson Caspers Vandenburg & Lindquist, P.A., Minneapolis, MN.

- Provided expert declaration in patent invalidity and infringement litigation related to **tape measures with metal blades**, 2020.
- Served as a technical expert in a patent infringement litigation related to **drill bits**, 2023.

Fish & Richardson P.C., Wilmington, DE, 2023.

- Served as a technical expert in a patent infringement litigation related to **handheld power saws**, 2023.

Hinckley, Allen & Snyder LLP, Providence, RI.

- Provided expert declarations and deposition testimony in patent infringement litigation related to **spring powered desktop staplers**, 2018.

Hoffmann & Baron, LLP, Parsippany, NJ.

- Provided expert declarations and deposition testimony in patent non-infringement litigation related to a **toy car and tube track system**, 2019.
- Served as a technical expert in a patent dispute involving **firepits**, 2022.

Latham & Watkins, LLP, New York, NY.

- Provided expert declaration related to patent infringement litigation related to **hand-held electric strapping machines**, 2022.

Lewis Brisbois Bisgaard & Smith LLP, Los Angeles, CA

- Served as technical expert in patent infringement litigation related to **magnetic eyelashes**, 2021.

McDermott Will & Emery LLP, Washington DC.

- Provided expert declarations related to patent invalidity and non-infringement, deposition testimony and hearing testimony before the ITC related to **gas spring powered nailers**, 2018.
- Provided expert declarations related to patent infringement litigation related to **powered nailers**, 2019.
- Provided expert declarations and deposition testimony related to an ITC Patent Modification proceeding related to **gas spring powered nailers**, 2020.

Meunier Carlin & Curfman LLC, Atlanta, GA.

- Provided expert declarations and deposition testimony in IPR patent litigation related to **hole saws**, 2016.
- Provided expert declarations in IPR patent litigation related to **children's play yards**, 2016.
- Provided expert declarations in IPR patent litigation related to **attachments for barbecue grills**, 2017.
- Provided expert declarations and deposition testimony in patent non-infringement litigation related to **inflatable air mattresses with integral pumps**, 2018.

Munck, Wilson and Mandala, LLP, Dallas, TX.

- Provided expert declarations and deposition testimony in patent infringement litigation related to **hand-held razors**, 2023.

Perkins Coie, San Diego, CA

- Provided expert declaration and deposition testimony in patent validity litigation related to **vacuum coolers**, 2021.

Procopio, Cory, Hargreaves & Savitch, LLP, Palo Alto, CA.

- Provided expert declaration in a patent post grant review (PGR) related to **coil spring motors that fold curtains and blinds**, 2020.

Robins Kaplan, LLP, Boston, MA.

- Provided expert declaration in infringement patent litigation related to **vaping devices (e-cigarettes)**, 2020.

Squire Patton Boggs LLP (US), Cleveland OH.

- Provided expert declaration and deposition testimony in IPR patent litigation, and expert declarations in ITC and US Customs litigation related to **attachments for mobile devices**, 2018.
- Provided expert declarations in IPR patent litigation related to **cable glands**, 2018.
- Provided expert declaration and deposition testimony in a patent Ex Parte Reexamination related to **hover boards**, 2021.

Wilson Sonsini Goodrich & Rosati, Seattle, WA.

- Provided expert declarations in patent interference litigation related to **apparatuses, systems, and methods for processing foodstuff**, 2019.
- Provided expert declarations in patent re examination litigation related to **patient controlled analgesic devices**, 2020.

Products Liability Litigation – Technical Expert

Conway Stoughton, L.L.C., West Hartford, CT.

- Provided expert reports and deposition testimony in product liability litigation related to a **cold/pressure therapy device**, 2017.
- Served as a technical expert in product liability litigation related to **extension ladders**, 2019.

Hitachi Koki USA, Norcross, GA.

- Provided expert reports and deposition testimony in product liability litigation related to **pneumatic nailers**, 2011 to present.
- Served as a technical expert in potential product liability litigation related to **beveling miter saws**, 2023.

Keyes and Donnellan, P.C., Springfield, MA.

- Provided deposition testimony in product liability litigation related to a **passenger van accident** with a fatality, 2009.

Makita Power Tools, La Mirada, CA.

- Provide services as a technical expert in potential product liability litigation related to **pneumatic nailers**, 2023.

Stanley/Black&Decker, New Britain, CT.

- Provided expert reports, deposition and trial testimony in product liability litigation related to **pneumatic nailers**, 2009 to present.

The TASA Group, Inc., Blue Bell, PA.

- Provide services as a technical expert in general product liability litigation related to **plumbing fittings, walking canes, acupuncture heat lamps, hammer drills and electric sanders**, 2015 to present.

Design, Analysis and Product Development

Bacou-Dalloz Eye and Face group, Smithfield, RI.

- Developed an engineering documentation system for experimental data and document control. August, 2006.

Chimney Works Company, Higganum, CT.

- Designed an alternate knuckle boom extension system for improved positioning of prefabricated concrete chimney sections, November, 2004.
- Performed a finite element stress analysis of a prefabricated concrete chimney chase to assess strength. April 2004.

Flow Design Inc., Springfield, MA.

- Design and development of surgical clips and clip applier used in cardio bypass surgery, April, 2007.
- Inspection and Testing of Titanium Vascular Clips, June, 2007.
- Tooling and Testing of Titanium Surgical Clips, August, 2007.

Hamilton Sundstrand Corporation, Windsor Locks, CT.

- Performed a finite element stress analysis of a titanium starter rotor used in jet engines, February, 2003.

The Hillman Group, Tempe, AZ.

- Perform numerical simulations to optimize deck screw performance, May, 2017.

Lenox Saw Company, East Longmeadow, MA.

- Developed a finite element model for simulation of band saw cutting. December, 2007.
- Developed improvements to band coil annealing processes using finite element analysis. February, 2008.
- Developed a numerical model for the prediction of the onset of crooked cutting. April, 2008.
- Developed a fully 3D finite element based methodology for the design of improved band saw cutting systems. October, 2010.

Shark/Ninja Co., Newton MA.

- Supervised engineering group in mainland China responsible for Finite element Analysis, 2016-2017.

Stanley Fastening Systems, East Greenwich, RI.

- Developed and fabricated a prototype of a CO₂ cartridge powered fastening tool June, 2004.
- Developed a dynamic material model for a nitrile elastomer used in impact bumpers in pneumatic fastening tools. November, 2004.

- Developed a dynamic load-deflection fixture for the experimental verification of dynamic FEA results. November, 2005.
- Designed an impact bumper for a small brad tool. January 2006.
- Developed an energy measuring device for pneumatic fastening tools based on the Split Hopkinson Pressure Bar Apparatus. August, 2006.

Utility Composites Inc., Round Rock, TX.

- Developed a hammer tacker for polymeric staples with integrated antennae, 2016. Patent granted for “Fastener Insertion System for Fasteners with Antennas”, US Patent No. 10,599,969, March 24, 2020.

RESEARCH/ CAPSTONE SENIOR DESIGN PROJECTS:

Consumer Products

- “Design of a Mechanically Self-Tightening Shoe”, Joseph Aberdale, 2021.
- “Development of an Affordable, Push Type Electric Golf Cart - Team A”, Daniel Buckson and Adam Razza, 2021.
- “Development of an Affordable, Push Type Electric Golf Cart - Team B”, Anthony Frati and Joshua Labonte, 2021.
- “Development of a PTSD Sleep Aid”, Luke Langelier and Rachel Brosnan, provisional patent filed, August 2019.
- “Design and Development of an Automated Ping Pong Server”, Dylan Moriarty and Nicholas Russo, 2019.
- “Design and Development of a Deflation-Proof Air Mattress”, Jaimie Lamacchia, 2019.
- “Design and Development of a Powered Eyeglass Cleaner”, Aleksander Calcagno, 2019.
- “Development of an Improved Guitar Bridge”, Christopher Carbonaro and Matt Schluckebier, 2019.
- “Comparison of Traditional and Polymer Constructed Point Shoes”, Nicole Powers, 2017.
- “Development of a Novel Snow Shovel”, Kevin Patterson, Shelbea Russel and Brett Schorr, 2017. Sponsored by Ergie Shovel, Inc., Springfield, MA.
- “Design of Safety Candle Topper”, Peter Kelley, 2016.
- “The Manufacture and Commercialization of Affordable Products for Goodwill Industries”, Shane Vitorino, 2015. Sponsored by Goodwill Industries, Springfield, MA.
- “Design of an Inflationless Basketball, Phase II”, Spencer Bracco, 2012. Sponsored by PSI 91 Co., Springfield, MA.
- “Design of a Revolutionary Two-Part Beverage Bottle”, Scott Carlson, 2012. Sponsored by Jesse Barbor, inventor.
- “Redesign and Fabrication of the Waterboy Water Purification System”, Mike Grinaski and Matt McCormack, 2012. Recipients of the College of Engineering award for the Design Solution with the Most Impact in a Global, Economic, Environmental and/or Societal Context. Results published in the Proceedings of the 2014 ASME IMECE in Montreal, Can., Nov. 2014. US Patent No. 9084949, July, 2015
- “Redesign and Fabrication of the Waterboy Water Purification System, Phase II”, Brian Hamel, 2012.
- “Design and Commercialization of the Sharp & Ready Knife Sharpening Shell”, Patrick McClain, 2012. Filed for a Provisional Patent, May 2012.
- “Design and Fabrication of a Heated Guide Fishing Pole”, Nick Moskwa, 2012. Filed for a Provisional Patent, May, 2012.
- “Development of an Inflationless Basketball”, Patrick Nadeau, 2012. Sponsored by PSI 91 Co., Springfield, MA.
- “Design and Fabrication of a Golf Laser Trainer”, Nick Taber, 2012. Sponsored by Ralph Thresher, inventor. Filed for a Provisional Patent, May 2012.
- “Development of a Combination Blade/Line Trimmer”, Michael Ferrarotti, 2011. Filed for a Provisional Patent, March 2011.
- “Development of an Autonomous Window Washing Robot”, Michael Lastrina, 2008. Entered in the ASME District A Design Competition, Professional, Student Professional Development Conference, CCSU, New Britain, CT, April 5, 2008.
- “The Development of an Energy Monitoring System for Athletic Training Sleds”, Sean Bramhall, 2007. Sponsored by SetPro Inc., Westbrook, CT.

DIY Products

- “Development of a Novel Bicycle Spoke Cutter and Rethreader”, Christian Thompson and Adam Vanasse, 2019.
- “Design of an Extruding Soldering Iron for Commercialization”, Matt Hahn and Nic DeMarco, 2018. Filed Provisional Patent 2019.
- “Design and Fabrication of a Recoil Reduction Device for Pneumatic Nailers, Ryan Begley, 2015. Sponsored by Stanley/Black&Decker, North Kingston, RI.
- “Design and Fabrication of a Recoil Reduction System for a Powder Actuated Nailer”, Jeffery Cooley, 2015. Sponsored by Stanley/Black&Decker, North Kingston, RI.
- “Reinventing One Handed Clamping”, Chad Bennet Bonn and Andrew Leoni, 2014. Sponsored by Irwin Tools, Charlotte, NC.
- “Design of a Hammer with Integrated Drill”, Andrew Egerton and Eric Buhl, 2014. US Patent No. 10,232,449B2, granted March, 2019.
- “Design and Fabrication of a Quick-Change Hole Saw Arbor”, Colby Conant, 2012. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Design of a One Handed Power Driven Pipe Expander”, Danielle Lloyd, 2011. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Design and Fabrication of a One-Handed Manual Pipe Swager”, Frank Neher, 2011. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Redesign of a Tape Measure Housing Using Explicit Dynamic FEA”, Justin Marsh, 2011. Sponsored by Stanley/Black&Decker, New Britain, CT.
- “Development of a Double Capacity Pneumatic Nailer Magazine”, Mark Herdman, 2009. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of an Innovative Cordless Reciprocating Saw”, Christopher Leonard, 2008. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Reduction of Recoil in Portable, Spring Loaded Fastening Tools”, Peter Fowler, 2008. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Design and Development of a Low Cost Stud Finder for Pneumatic Fastening Tools”, Kari Kisselbrack, 2006. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of a Feed System for a Non-Pneumatic Nailer”, Sean O’Claire. 2005. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of a Cycle Counter for a Pneumatic Fastening Tool”, Joe Sibilis, 2004. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Optimization of a Hammer Tacker Design”, Joe Bielin, 2004. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of a Drive Piston Retaining Device for a Pneumatic Fastening Tool”, Evan Weber, 2004. Sponsored by Stanley Fastening Systems, East Greenwich, RI.

Industrial Products

- “Design of an Energy Producing Floor Tile for Sustainability”, Thomas Gonzales, 2020.
- “Design of an Energy Harvesting Passive Energy Device”, Christopher Patenaude, 2020.
- “Design and Fabrication of A Dog Toy Making Machine”, Brandon Valesques, 2018. Sponsored by Goodwill of Springfield, MA.
- “Motorcycle Food Delivery System - Design of A Motorcycle Mount”, Eric Murphy, 2017. Sponsored by Acres Investments, SA, Lima Peru.
- “Motorcycle Food Delivery System - Design and Fabrication for Commercialization”, Jonathan Eheander, 2016. Sponsored by Acres Investments, SA, Lima Peru.
- “Design and Fabrication of a Tubing Straightener for HVAC Applications”, Ethan Freedman, 2016. Sponsored by Hilmor, Inc., East Longmeadow, MA.
- “Design and Fabrication of a Dog Toy Making Machine”, Brenna Dillner, 2016. Sponsored by Goodwill of Springfield, MA.
- “Motorcycle Food Delivery System”, Jean-Luc LaLiberte and Abigail Powers, 2016. Sponsored by Acres Investments, SA, Lima Peru.
- “Motorcycle Food Delivery System”, Ronald Foshay and Gregory Porter, 2015. Sponsored by Acres Investments, SA, Lima Peru.

- “Design & Integration of a Motorcycle Food Delivery System”, Andrew McManus and Michael Tranghese, 2015. Sponsored by Acres Investments, SA, Lima Peru.
- “Design and Fabrication of a Wireless Thermocouple Housing for HVAC Applications”, Alex Simms, 2015. Sponsored by Hilmor Inc., East Longmeadow, MA.
- “Improved Motorcycle Food Delivery System”, Connor Dion and Bruce Funteral, 2014. Sponsored by Acres Investments, SA, Lima, Peru.
- “Design of an Improved Fire Protection Fitting”, Marcus Pelleschi, 2014.
- “Design and Fabrication of a Secondary Power Generating Unit Used to Recycle Wasted Energy”, Leonardo Bartolomeo, 2012. Sponsored by the Nicolas Bartolomeo Co., Springfield, MA.
- “Development of a Push off Impact Pendulum for Carbide Tips”, Joe Bernard, 2010. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Design and Fabrication of a Segmented Band Saw Blade Tester”, Kevin Motson, 2010. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Redesign of a Fastening Tool Using Explicit Dynamic FEA”, Alex Racicot, 2010. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of a Robotic Saw Tester”, Edward Davis, 2009. Sponsored by Lenox Saw Company, East Longmeadow, MA.
- “Design and Fabrication of an Automated Withdrawal Fixture for Fastener Testing”, Ross Bennet-Bonn, 2009. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Design and Development of a System for Measuring the Overall Efficiency of a Compressor Nailer Fastening System”, Mike Oraziatti, 2007. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Development of a Portable Energy Measuring Device for Pneumatic Fastening Tools”, Seth Glaser, 2006. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Redesign of a Surgical Clip Applier”, Kevin Lutter, 2005. Sponsored by SK3 Corporation, Springfield, MA.
- “Measurement of Closeness of Shave Using Vibratory Techniques”, Lindsay Maguire, 2004. Sponsored by Remington Products Company, L.L.C., Bridgeport, CT.
- “Development of Alternate Methods for Dynamic Loading of Pneumatic Fastening Tools”, Dave White, 2004. Sponsored by Stanley Fastening Systems, East Greenwich, RI.

Vehicle Design

- “Development of a Four Wheel Drive SAE Mini Baja Vehicle”, Michael Greider, Nigel Baldwin and Austin Rendon, 2021.
- “Improvement of SAE Baja Drivetrain Performance”, Adam Lee, 2020.
- “Design of a Four Wheel Drive System for an SAE Mini Baja Vehicle”, Trent Gobel and Elijah Jean, 2020.
- “Design and Analysis of Stacked vs. Compound Epicyclic Gear Trains for Slow Speed Applications”, Samantha Flamand and Zachary Blanchard, 2020.
- “Development of a Four Wheel Drive System for an SAE Mini Baja Vehicle”, Peter Schultz, Ethan Pelley and Jeff Barthelette, 2020.
- “SAE Baja Vehicle - Sprag Clutch Differential and Gear Optimization”, Travis Armento, 2019.
- “SAE Baja Vehicle - Development of a Torsen Differential”, David Snee, 2019.
- “Design and Fabrication of a Jeep Wrangler Door Check Mechanism”, Ryan Heacox, 2016.
- “Design & Fabrication of a Low Cost Motorized Transportation Vehicle”, Tyler Partington, 2015.

General Research

- “Development of an Automated Loading System for the Mechanics of Materials Bridge Busting Competition”, Cole McGee and Hillary Naranjo-Majia, 2018.
- “Modeling Screw Withdrawal in Concrete Using Finite Element Analysis”, Russell Perry, 2018. Sponsored by The Hillman Group, Tempe, AZ.
- “Development of a Predictive Design Methodology for Structural Polymers Subjected to Long Term Loading”, Julie Jackson, 2012. Results published in the Proceedings of the 2012 ASME IMECE in Houston, TX, Nov. 2012. Sponsored by Stanley/Black&Decker, East Greenwich, RI.
- “Development of a Curved Hopkinson Bar for the Measurement of Impact Load and Energy Transmission”, Micah Bowen, 2011. Results published in the Proceedings of the 2011 ASME IMECE, Denver, CO, Nov. 2011.

- “Methodology for Material Selection in Product Design”, Andrew Labrie. 2011. Sponsored by Stanley/Black&Decker, New Britain, CT.
- “Finite Element Modeling of a Mortar Base Plate and Soil Interaction”, Kelley MacDonald, 2010. Sponsored by the United States Army—Cold Regions Research and Engineering Laboratory.
- “Design and Fabrication of a Small Engine Dynamometer”, Eric Perkins, 2010.
- “Development of a Sustainable Biodiesel Fuel Generation System – Phase 2”, Philip Casey, 2009.
- “Development of a Biodiesel Fuel Generation System”, James Pinsonneault, 2008. Won 3rd place in the ASME District A Student Professional Development Conference, Old Guard Oral Presentation Competition, CCSU, New Britain, CT, April 5, 2008.
- “Determination of the Static and Dynamic Mechanical Properties of a Microcellular Urethane (MCU) Used as an Impact Bumper in Pneumatic Nailers”, James Goulet, 2008. Sponsored by Stanley Fastening Systems, East Greenwich, RI.
- “Determination of Dynamic Mechanical Properties of Adhesives and Porcelains used for Dental Implants”, Tim Hickey, 2007. Sponsored by Beniot Family Dentistry, Old Saybrook, CT. Results presented at the 2010 ASEE Regional Conference, Boston, MA.
- “Design and Development of a Split Hopkinson Pressure Bar Apparatus for Tensile Loading”, Dave Mucciacciaro, 2007.
- “Design of a Specimen Heating System for Dynamic Material Testing”, Steven Army, 2006. Results published in the Proceedings of the 2006 ASME IMECE, Chicago, IL, Nov. 2006.
- “Design and Development of a Full Sized Charpy Impact Tester”, James Dutelle, 2006.
- “Design and Construction of a Torsion Testing Apparatus”, Robert Short 2006. Results published in the Proceedings of the ASEE New England Section 2006 Annual Conference.
- “Automation of a Rebound Pendulum”, Hung Truong, 2005.
- “Design of a Data Acquisition System for a Split Hopkinson Pressure Bar”, Steve Coduri, 2004.
- “A Study of the Effect of Corking a Baseball Bat on Hitting Performance”, Nate Soucy, 2004.
- “Determination of Dynamic Modulus of Elastomeric Materials Using Rebound Measurements”, Doug Almieda, 2004.
- “Determination of Material Properties at Very High Rates of Loading”, Richard Rose, 2003.
- “The Experimental and Analytical Determination of Stresses in Tennis Racquets”, Aaron Dinoto, 2003.
- “Analysis of Stress and Strain on Large Gas Pipes”, Gerry Guillmeister, 2003. Sponsored by Bay State Gas Company, West Springfield, MA.

PUBLICATIONS / PRESENTATIONS

Schoonmaker, M., Gettens, R., Vallee, G., “Building the Entrepreneurial Mindset Through Cross-Functional Innovation Teams”, Entrepreneurship Education and Pedagogy, Volume 3 Issue 1, January 2020, pp. 41-59.

Vallee, G. E., and Eheander, J., Development of a Motorcycle Food Delivery System from an International Perspective”, technical publication, presented at the ASME International Mechanical Engineering Congress and Exposition, Tampa, FL, November 2017, Paper no IMECE2017-70343.

Vallee, G. E., “Implementation of Multi-Year Product Innovation Projects”, technical publication, presented at the ASME International Mechanical Engineering Congress and Exposition, Montreal, Canada, November, 2014. Paper No. IMECE2014-36443.

Jackson, J. R., and Vallee, G. E., “Development of a Predictive Design Methodology for Structural Polymers Subject to Long-Term Loadings”, technical publication, ASME International Mechanical Engineering Congress and Exposition, Houston, TX, November, 2012. Paper No. IMECE2012-87912, pp. 389-396.

Vallee, G., and Bowen, M., “Development of a Curved Hopkinson Bar for Long Wavelength Impact Events”, technical publication, presented at the ASME International Mechanical Engineering Congress and Exposition, Denver, CO, November, 2011. Paper No. IMECE2011-62914, pp. 707-715.

Vallee, G., and Benoit, R., "Translating Dental Performance into Engineering Science within a Senior Capstone Design Project", technical publication and presentation at the New England Regional Conference of the American Society of Engineering Educators, Boston, MA, May, 2010.

Vallee, G., Casey, P. and Pinsinneault, J., "An Interdisciplinary Laboratory Experience for Sustainability", technical publication presented at the ASME International Mechanical Engineering Congress and Exposition, Lake Buena Vista, FL, November, 2009. Paper No. IMECE2009-10389, pp. 325-334.

Vallee, G., "A Novel Course in Product Innovation", technical publication presented at the ASME International Mechanical Engineering Congress and Exposition, Boston, MA., November, 2008. Paper No. IMECE2008-66632, pp. 143-150.

Vallee, G. and Army, S., "Determination of the Temperature Dependent Dynamic Response of Elastomeric Materials Using the Split Hopkinson Pressure Bar", technical publication presented at the ASME International Mechanical Engineering Congress and Exposition, Chicago, Ill., November, 2006, Paper No. IMECE2006-13262, pp. 173-179.

Vallee, G., and Short, R., "Design and Development of an Economical Torsion Testing Machine", presented at the ASME New England Regional Conference, WPI, Worcester, MA, March, 2006.

Northrup, S, Vallee, G., and Moriarty, J., "A Successful Interdisciplinary Design Experience", Presented at the American Society of Engineering Educators Conference, Nashville, TN., June, 2003.

Vallee, G. E., and Shukla, A., "Static and Dynamic Response of Elastomeric Materials -An Insight Into the Design of Durable Elastomeric Components", International Journal of Engineering Design, Vol. 8, No. 3, August, 1997. Presented at the International Conference on Finite Element Analysis of Rubber and Rubber-Like Materials, University of Akron, Akron, Ohio, May 19-20, 1999.

Vallee, G. E., and Shukla, A., "A Study of Elastomeric Materials Using Finite Elements", ASME Journal Of Engineering Materials and Technology, Vol. 118, No. 4, October, 1996, pp. 503-508.

Vallee, G. E., and Shukla, A., "A Study of Elastomeric Materials Using Finite Elements", ASME Journal Of Engineering Materials and Technology, Vol. 118, No. 4, October, 1996, pp. 503-508. Presented at the International Conference on Finite Element Analysis of Rubber and Rubber-Like Materials, University of Akron, Akron, Ohio, March 20-21, 1997.

Vallee, G. E. and Shukla, A., "Development of a Dynamic Load-Deflection Apparatus for Elastomeric Materials", ASTM Journal of Testing and Evaluation, Vol. 23, No. 5, September, 1995, pp. 358-364.

GRANTS

"Woody Biomass Demonstration Project at Western New England College" Massachusetts Clean Energy Center, co-PI with Dr. S. Dini and Dr. A. Klimes, Western New England College, 2010. (\$74,000)

"Next Generation Wind Turbine", Department of Energy Award No. DE-EE0003276, in conjunction with FloDesign Wind Turbine, LLC. One month summer salary to study structural dynamics of wind turbine support and control structure.

"Creation of a Product Development and Innovation Course", National Collegiate Inventors and Innovators Alliance (NCIIA), co-PI with Dr. S. Schriener and Dr. J. McKeon, Western New England College, 2008. (\$25,000)

"Development of a New Computer-Aided Data Acquisition and Processing Course", Western New England College, Faculty Development Grant, Spring, 2008. (\$1,500)

"Development of a Senior ME Design Elective Course in Product Innovation", Western New England College, Faculty Development Grant, Fall, 2007. (\$1,500)

“Development of a Web Based Course in Applied Machine Design”, Western New England College, Research Grant, Summer, 2006. (\$3,000)

“Development of a Demonstration Kit for Enhanced Learning in Mechanics of Materials”, Western New England College, Faculty Development Grant, Spring, 2005. (\$2,000)

“A Study of the Dynamic Mechanical Properties of Elastomers Under Multiple Deformation Modes”, Western New England College, Research Grant, Summer, 2003. (\$3,000)

“Development of a Demonstration Kit for Enhanced Learning in Statics and Dynamics”, Western New England College, Faculty Development Grant, Spring, 2003. (\$1,875)

LICENSES / PATENTS

Registered as a Professional Engineer with the State of Rhode Island, lic. # 6765.

“Convertible Contact/Sequential Trip Trigger, US Patent No. 5,551,620, September 3, 1996.

“Convertible Contact/Sequential Trip Trigger with Double Actuation Prevention Structure”, US Patent No. 5,551,621, September 3, 1996.

“Portable Drill Bit Sharpener”, US Patent No. 8,690,643, April 8, 2014.

“Biopsy Spacer Device and Method of Operation”, US Patent No. 8,932,251, January 13, 2015.

“Water Purification System”, US Patent No. 9,084,949, July 21, 2015.

“Biopsy Spacer Device and Method of Operation”, US Patent No. 9,233,231, January 12, 2016.

“Flexible Electrical Power Strip”, US Patent No. 10,038,272, July 31, 2018.

“Combination Tool”, US Patent No. 10,232,449B2, March 19, 2019.

“Fastener Insertion System for Fasteners With Antennas”, US Patent No. 10,599,969, March 24, 2020.

Testimony History
Glenn E. Vallee Ph.D., P.E.

Date of Testimony	Case Name	Client	Type	Testimony	Location
8/28-29/1997	Stipes v. The Stanley Works, et. al.	The Stanley Works	Defendant, Nailer Accident	Deposition	Hicksville, NY
12/2/1997	Rancourt v. The Stanley Works	The Stanley Works	Defendant, Nailer Accident	Trial Testimony	Boston, MA
3/6/2009	Knight v. Community Transportation Services, Inc., et. al.	Community Transportation Services, Inc.	Defendant, Transportation Van Accident	Deposition	Springfield, MA
8/20/2009	Mosier v. Stanley Bostitch	Stanley Works	Defendant, Nailer Accident	Deposition	Birmingham, ALA
4/14/2010	Mosier v. Stanley Bostitch	Stanley Works	Defendant, Nailer Accident	Trial Testimony	Birmingham, ALA
10/12/2012	Valway v. Stanley Bostitch	Stanley Works	Defendant, Nailer Accident	Trial Testimony	Philadelphia, PA
1/15/2015	Garrity v. Medline Industries	Theresa garrity	Plaintiff Cain Failure	Deposition	Hartford, CT
11/21/2015	Kissel v. Center for Women's Health et. al.	HBW Works Supply	Defendant, Heat Lamp Accident	Deposition	Hartford, CT
5/11/2016	MILWAUKEE ELECTRIC TOOL CORPORATION v. IRWIN INDUSTRIAL TOOL COMPANY	Irwin Industrial Tool Co.	Defendant IPR Patent litigation	Deposition	Hartford, CT
9/2/2016	Wilmer Santos-Maza v. Hitachi USA	Hitachi USA	Defendant Nailer Accident	Deposition	Newark, NJ
4/21/2017	Himilton v. Stanley Bostitch	Stanley Works	Defendant Nailer Accident	Deposition	Peabody, MA
12/7/2017	Kissel v. Center for Women's Health et. al.	HBW Works Supply	Defendant, Heat Lamp Accident	Trial Testimony	Stamford, CT
3/22/2018	Cavahagh v. Coolsystems	Coolsystems	Cold therapy machine defendant	Deposition	Hartford, CT

5/22/2018	Amax and Worktools, Inc. v. Accco Brands Corp	Amax/Worktools	Plaintiff Desktop Spring Powered Staplers, Infringement	Deposition	Hartford CT
6/19/2018	Team World Wide v. Walmart et. al.	Coleman	Defendant, Air mattresses with embedded air pumps, Noninfringement	Deposition	Atlanta, GA
7/25/2018	Kyocera Senco v. Hitachi Koki USA	Hitachi Koki USA	Defendant Gas Spring Nailers, Noninfringement	Deposition	Washington DC
10/19/2018	PopSockets LLC v. Quest UAS Corp	Quest USA Corp	Defendant Mobile Phone Accessories, IPR, Noninfringement	Deposition	Cleveland OH
10/30/2018	Kyocera Senco v. Hitachi Koki USA	Hitachi Koki USA	Defendant Gas Spring Nailers, Noninfringement	ITC Hearing Testimony	Washington DC
4/12/2019	Ever Victory v. SAS group	SAS group	Defendant Toy Track and Car Noninfringement	Deposition	Parsippany, NJ
8/14/2019	PopSockets LLC v. Quest UAS Corp	Quest USA Corp	Defendant Mobile Phone Accessories, IPR, Noninfringement	Deposition	Cleveland OH
6/3/2020	Koki Holdings v. Kyocera Senco	Koki Holdings	Plaintiff, Power driven fastening tools, Infringement	Deposition	Westbrook CT via Zoom

12/23/2020	Kyocera Senco v. Hitachi Koki USA	Hitachi Koki USA	Defendant Patent Modification Proceeding - Gas Spring Nailer Patent	Deposition	Westbrook CT via Zoom
8/12/2021	HEB, LP v. Wadley Holdings LLC, et.al.	HEB, LP	Plaintiff, Recreational Coolers, Patent Infringement	Deposition	Westbrook, CT via Zoom
11/17/2021	Ever Victory v. SAS group	SAS group	Defendant Toy Track and Car Noninfringement	Deposition	Parsippany, NJ
5/12/2022	Robert Bosch Tool Corp. v. Delta Power Equipment Corp.	Bosch Tool Corp.	Plaintiff, Beveling miter saw Infringement	Deposition	Hartford, CT
2/22/2023	Gillette Co, LLC v. Sphere USA	Sphere, USA	Defendant, Hand held razor, PGR	Deposition	Westbrook, CT via Zoom
4/4/2023	DGL Group v. Chic Co. LLC	DGL Group	Plaintiff, Hoverboard, IPR	Deposition	Westbrook, CT via Zoom
patent caes					