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Educational Background

- 2014-2018 PhD in Mechanical Engineering, *University of Georgia*, Athens, Georgia, US.
 - 2006-2009 MS in Mechanical Engineering, Solid Mechanics, *University of Tabriz*, Tabriz, Iran.
 - 2001-2006 BS in Mechanical Engineering, Solid Mechanics, *University of Tabriz*, Tabriz, Iran.
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Research Interests

- Solid mechanics, Biomechanics, Finite element modeling, Mechanics of soft matter and soft biological tissues, Cortical folding of brain, Fracture mechanics, Fatigue and failure analysis, Smart materials.
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Publications

Books

- **M.J. Razavi**, H. Mobki, “*Explanatory Manual Solution to 7th Edition of Mechanical Engineering Design of J.E.Shigley –First Volume*”. Elmiran Publication, Tabriz, Iran, December 2007.
- **M.J. Razavi**, H. Mobki, “*Explanatory Manual Solution to 7th Edition of Mechanical Engineering Design of J.E.Shigley –Second Volume*”. Elmiran Publication, Tabriz, Iran, February 2010.

Journal Papers

- T. Zhang, H. Chen, **M.J.Razavi**, Y. Li, F. Ge, L. Guo, X. Wang, T. Liu, “ *Exploring 3-hinge Gyral Folding Patterns among HCP Q3 868 Human Subjects*”, 2018, Human Brain Mapping, accepted.
- F. Ge, X. Li, ***M.J. Razavi**, H. Chen, T. Zhang, S. Zhang, L. Guo, X. Hu, X. Wang, T. Liu, “*Denser Growing Fiber Connections Induce 3-hinge Gyral Folding*”, 2017, doi: 10.1093/cercor/bhx227. *First co-author
- **M.J. Razavi**, T. Zhang, H. Chen, S. Platt, Y. Zhao, L. Guo, X. Hu, X. Wang and T. Liu, “*Radial Structure Scaffolds the Convolution Patterns of Developing Cerebral Cortex*”, Frontiers in Computational Neuroscience, 2017, doi: 10.3389/fncom.2017.00076.
- **M.J. Razavi**, M. Reeves, X. Wang, “*Mechanical role of a growing solid tumor on cortical folding*”, Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20(11), 1212-1222.
- K. Brooks, **M.J. Razavi**, X. Wang, J. Locklin, “*The evolution of creased morphologies using reactive droplets in ultrathin films*”, Advance Material Interface, 2017, doi: 10.1002/admi.201700084.
- X. Li, H. Chen, T. Zhang, X. Yu, X. Jiang, K. Li, L. Li, **M.J. Razavi**, X. Wang, X. Hu, J. Han, L. Guo, X. Hu, T. Liu, “*Commonly preserved and species-specific gyral folding patterns across primate brains*”, Brain Structure and Function, 2017, 222(5), 2127-2141.
- G. Stoychev, **M.J. Razavi**, X. Wang, L. Ionov, “*4D origami by smart embroidery*”, Macromolecular Rapid Communications, 2017, doi: 10.1002/marc.201700213.

- T. Zhang, ***M.J. Razavi**, H. Chen, Y. Li, X. Li, L. Li, L. Guo, X. Hu, T. Liu, X. Wang, “*Mechanisms of circumferential gyral convolution in primate brains*”. Journal of Computational Neuroscience, 2017, 42, 217-229. *First co-author
- T. Zhang, ***M.J. Razavi**, X. Li, H. Chen, T. Liu, X. Wang, “*Mechanism of Consistent Gyrus Formation: an Experimental and Computational Study*”, Scientific Reports, 2016, 6 (37272). *First co-author
- **M.J. Razavi**, R. Pidaparti, X. Wang, “*Surface and interfacial creases in a bilayer tubular soft tissue*”, Physical Review E, 2016, 94 (022405).
- K. Brooks, **M.J. Razavi**, X. Wang, J. Locklin, “*Nanoscale Surface Creasing Induced by Post-Polymerization Modification*”, ACS Nano, 2015, 5b04144.
- **M.J. Razavi**, T. Zhang, T. Liu, X. Wang, “*Cortical Folding Pattern and its Consistency Induced by Biological Growth*”, Scientific Reports, 2015, 5, 14477.
- **M.J. Razavi**, T. Zhang, X. Li, T. Liu, X. Wang, “*Role of mechanical factors in cortical folding development*”, Physical Review E, 2015, 92 (3), 032701.
- **M.J. Razavi**, X. Wang, “*Morphological patterns of a growing biological tube in a confined environment with contacting boundary*”, RSC Advances, 2015, 5 (10), 7440-7449.
- T.N. Chakherlou, ***M.J. Razavi**, A.B. Aghdam, B. Abazadeh, “*An experimental investigation of the bolt clamping force and friction effect on the fatigue behaviour of aluminum alloy 2024-T3 double shear lap joint*”, Materials & Design, 2011, 32 (8-9), 4641-4649. *Principal author, first name was my supervisor.
- T.N. Chakherlou, ***M.J. Razavi**, A.B. Aghdam, “*On the variation of clamping force in bolted double lap joints subjected to longitudinal loading: A numerical and experimental investigation*”, Strain: An International Journal for Experimental Mechanics, 2012, 48 (1), 21-29. *Principal author, first name was my supervisor.
- T.N. Chakherlou, ***M.J. Razavi**, B. Abazadeh, “*Finite Element investigations of bolt clamping force and friction coefficient effect on the fatigue behaviour of aluminum alloy 2024-T3 in double shear lap joint*”, Engineering Failure Analysis, 2013, 29, 62-74. *Principal author, first name was my supervisor.
- M.R. Khoshrovan, A. Khalili, **M.J. Razavi**, “*Numerical Analysis of the Effect of Added hole on the Stress Concentration of a Perforated Plate and Determining of Its Optimum Location*”, Key Engineering Materials, Vols. 452-453, Advances in Fracture and Damage Mechanics IX, 2011, 793-796.

Conference Papers

- **M.J. Razavi**, X. Wang, “*Effect of Pressure on the Formation of Creases in a Soft Tissue*”, Annual Meeting of the American Society of Biomechanics, 2017, 8-11 August, Boulder, Colorado, USA.
- **M.J. Razavi**, T. Zhang, R. Romeo, T. Liu, X. Wang, “*Investigation of Mechanical Parameters Role on the Morphogenesis of Cortical Folding*”, USNCCM 2015, 26-30 July, San Diego, USA.
- X. Wang, **M.J. Razavi**, T. Zhang, T. Liu, “*Computational Study of Cortical Convolution Patterns in a Developing Brain*”, USNCCM 2015, 26-30 July, San Diego, USA.
- **M.J. Razavi**, X. Wang, “*Growth and instability of soft tissue in confined environment*”, SES 2014, 1-3rd October, Purdue University, Indiana, USA.
- T.N. Chakherlou, **M.J. Razavi**, F. Esmaili, “*Effect of Bolt Clamping Force in Hybrid Single-Lap Joint Using Finite Element Method*”, 17th Annual(International) Conference on Mechanical Engineering ISME2009, Tehran, Iran, 19-21 May, 2009.

- T.N. Chakherlou, **M.J. Razavi**, M.M. Seyyed Fakhrabadi, “*Elastic-Plastic Analysis of Nozzles in Pressure Vessels*”, 17th Annual (International) Conference on Mechanical Engineering ISME2009, Tehran, Iran, 19-21 May, 2009.
- T.N. Chakherlou, **M.J. Razavi**, F. Esmaili, “*Investigation of Adhesive Thickness Effect in Hybrid Double-Lap Joint Using Finite Element Method*”, 8th International Conference of Iranian Aerospace Association (IAS2009) Isfahan, Iran, 17-19 February, 2009.
- M. Zehsaz, F. Esmaili, **M.J. Razavi**, “*Effect of Hole Diameter in Fatigue Life of 7075-T6 Aluminum Alloy Plates Using Volumetric Approach*”, 8th International Conference of Iranian Aerospace Association (IAS 2009) Isfahan, Iran, 17-19 February, 2009.
- M. Zehsaz, F. Esmaili, **M.J. Razavi**, “*Numerical Analysis of effect of Adhesive Thickness in Hybrid Single-Lap Joint*”, 9th International Conference of Iranian Aerospace Association (IAS 2009) Tehran, Iran, 8-10 February, 2010.
- **M.J. Razavi**, T.N. Chakherlou, “*Experimental and Numerical Investigation About Wear Phenomenon in The Aluminum Bolted Double Shear Lap Joint in Fatigue Loading*”, 9th International Conference of Iranian Aerospace Association (IAS 2011), Tehran, Iran, 1-3 March 2011.
- **M.J. Razavi**, T.N. Chakherlou, H. Nasserri, “*Experimental and Numerical Investigation About Effect of Lubrication on the fatigue Behaviour of bolted double shear lap joint in fatigue Loading*”, 19th Annual (International) Conference on Mechanical Engineering ISME2011, Birjand, Iran, 10-12 May, 2011.
- **M.J. Razavi**, G. Hashemi, T.N. Chakherlou, “*Experimental Fatigue Life Improvement of Double Shear Lap Bolted Joints in Aerospace Structures*”, 1th National Congress Aging of Aircraft, Tehran, Sharif University of Technology, 5-7 July, 2011.

Awards

- Best graduate research project of graduate students, 2015, College of Engineering, UGA.
- Best graduate research project of graduate students, 2018, College of Engineering, UGA.
- Graduate Excellence Award, 2018, College of Engineering, UGA.

Reviewer

- Journal of Mechanics Engineering and Automation
- Journal of Aerospace Engineering

Working Experiences

- Design Engineer at **Tabriz Engineering Research Center**, Tabriz, Iran (December 2007- July2011).
Mechanical design, analysis, and manufacturing of heavy-duty machines; Crane and Winch.