Mohsen Sharifi Renani

Department of Civil and Mechanical Engineering
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Educational Background

- **M. Sc. in Mechanical Engineering-Biomechanics**
  University of Missouri-Kansas City, Kansas City (UMKC), MO, USA, Expected Fall 2017
  Graduate Thesis: ''*Computational Multi-body and Finite Element Modeling of Human Elbow*'', under supervision of Dr. A. Stylianou
  University of Toledo, Toledo, OH, USA, Fall 2014
- **B.Sc. in Mechanical Engineering**
  Isfahan University of Technology, Isfahan, Iran, Fall 2014
  Undergraduate Thesis: *"Structural Health Monitoring through Ultrasonic Guided Waves, Wavelet Transform and Computer Vision", under supervision* of Dr. H. R. Mirdamadi

Research Interests

- **Biomechanics and Biomedical Engineering**
- **Computational Multi-body Dynamics**
- **Finite Element Modeling and Analysis**

Publications

- **Journal and Conference Papers**
  - **Sharifi Renani, M.**, Mossayebi, A., AmeriNatanzi, A., Jamshidi, N. *''Finite Element Modeling of Human Foot and Ankle with Assigned Different Material Properties for the Bones''***,** Midwest meeting of American Society of Biomechanics, Akron, Ohio, February 2015
  - **Sharifi Renani, M.**, Jamshidi, N.**,** Abdar Esfahani, M. ''*3D modeling of human heart using CT scan images''*, Novel Approaches of Biomedical Engineering in Cardivascular Diseases Conference, Fall 2014
  - **Sharifi Renani, M.**, Jamshidi, N.**,** Abdar Esfahani, M., ''*Three-dimension modeling of human heart using medical images",* Iranian Red Crescent Medical Journal, submitted Fall 2014
  - Mirdamad, H. R., Aminian, A., **Sharifi Renani, M.**, Assadolahi, M. S. "*An abstractive scene recognition approach based on guided ultrasonic waves, computer vision and wavelet transform for damage monitoring structures"*, Proceeding of The Royal Society, 2014
  - Mossayebi, A., **Sharifi Renani, M.**, Jamshidi, N., '' *Design an insole and investigation of its effect on soft tissue of foot by finite element method*'', In progress
- **Books**
  - **Sharifi Renani, M.**, Jamshidi, N., Ahmadi, F. '' *Solid Foot modeling in biomechanics_ Step by Step",* University of Isfahan, submitted, Fall 2014
  - Abdar Esfahani, M.**,** Jamshidi**,** N., **Sharifi, M.,** *'Biomechanics of Heart: 3D Modeling Using CT or MRI''*, ISBN-10150278615X, Fall 2014

Patent

- **Sharifi Renani, M.**, Amini, J. *''Safety and Speedy Cherry Pitter''***,** Isfahan University of Technology, Isfahan, Iran, Fall 2013

Honor and Awards

- Awarded Research and Teaching Assistantship to peruse M. Sc. in UMKC
- Awarded DISA scholarship, UMKC, MO, USA, Spring-Fall 2015
- Awarded Tuition Scholarship to peruse M. Sc. in University of Toledo, Toledo, OH, USA, Fall 2014

Academic Experiences

- **Research**
  - Graduate Research Assistant, Biomechanics and Motion Analysis Labs
    University of Missouri-Kansas City, Kansas City, MO, USA, Spring 2015-Present
    Computational Multibody Dynamic and Finite Element Modeling of Human Elbow
  - Graduate Research Assistant, Engineering Center for Orthopedic Research Excellence (ECORE), University of Toledo, OH, USA, Fall 2014
    - *Finite Element Modeling of Human Knee-Concentrated on ACL Injury*
    - *Mesh Generation of Human Hip and Pelvis*
  - Research Assistant, University of Isfahan, Isfahan, Iran, Spring-Summer 2014
    - *Investigation of a Designed Insole on the Pressure Distribution of Plantar Fascia using Finite Element Analysis*
    - *Computational 3D Modeling of Human Heart using Medical Images*
  - Research Assistant, *Smart Material and Structure Lab*, Isfahan University of Technology, Isfahan, Iran, 2012-2013
    Structural Health Monitoring Through Guided Ultrasonic Waves, FEM, Wavelet Transform, and Computer Vision
- **Teaching**
  - Graduate Teaching Assistant, *'Mech Design Synthesis''*, 3D Printing Lab, Dr. Bloemker, University of Kansas City, MO, USA, Spring 2015
  - Graduate Teaching Assistant, *''Thermodynamic 1''*, Dr. Jayatissa, University of Toledo, OH, USA, Fall 14
  - Teaching Assistant, *"Vibration"*, Dr. Mirdamadi, Isfahan university of Technology, Isfahan, Iran, Fall 2013
  - Grading Assistant, "*Strength of Material",* Dr. Akbarzadeh, Isfahan university of Technology, Isfahan, Iran, Fall 2012
- **Other**
  - Workshop Participator on ''*Nanotechnology (N / MEMS) and Smart Structures*"
    Is Lectured by Prof. Montazami, Professor of Department of Mechanical Engineering and Director of Advanced Materials lab**,** Iowa State University, USA, Spring 2012
  - Translating Assistant of **"***Autodesk Inventor*" book, under supervision of Dr. Jamshidi, Technische Universität München (TUM), Europe Union
  - Editorial staff of ''*Mechanica Journal''***,** Journal of Mechanical Department, IUT, Isfahan, Iran,
  - **Internship** in **"Iran Hirmand Company",** Tile manufacturing machinery, Iran, Summer 2012 (Working and doing research)

Computer Skills

- ADAMS, ABAQUS, FEBio, HYPERMESH, IA-FEMesh, CATIA (CAD), MIMICS, GEOMAGIC STUDIO, VICON (Motion Analysis), MINITAB, Microsoft Office Word, Excel, and Power Point