



## CURRICULUM VITÆ

### ARASH RAZMJOO

**“Dr. Razmjoo is a rare dual Ph.D. degreed expert with extensive knowledge and great accomplishments in addressing complex engineering and biomechanics problems.”**

Ph.D. Civil Engineering

Ph.D. Mechanical Engineering

M.Sc. Mechanical Engineering

B.Sc. Mechanical Engineering

## 1. BIOGRAPHY

Dr. Razmjoo is a lead engineer and biomechanics expert at LISKE Accident & Injury Experts and handles product liability, premises liability, and injury biomechanics cases. Dr. Razmjoo has a very unique background in the rare accomplishment of a dual Ph.D. in Mechanical Engineering and Civil Engineering. In his research and work experience, Dr. Razmjoo has successfully resolved complex engineering and biomechanics problems.

### A. Biomechanics Expert

Dr. Razmjoo resolves issues involving the biomechanics of injuries, with expertise in the areas of computational and orthopedic biomechanics, medical device design and development, and medical image processing. Dr. Razmjoo conducts multi-disciplinary investigations supplemented with theoretical and numerical analysis to identify and resolve problems.

Dr. Razmjoo is a published Biomechanics expert in the Journal of Biomechanics, Journal of Back and Musculoskeletal Rehabilitation, Journal of Modern Rehabilitation, and Journal of Engineering in Medicine. Dr. Razmjoo has extensively studied the risk of fracture in osteoporosis, the strength levels and failure patterns of human organs, and spinal kinematics.

Dr. Razmjoo holds the US provisional patent entitled “Human spine kinematic analysis” and the patent “Three-dimensional color map quantitative computed tomographic based bone mineral densitometry”. Dr. Razmjoo is a member of the editorial board of EC Orthopaedics (ECOR), and a member of the American Society of Mechanical Engineers (ASME). He also served as a member of the science committee in the Society for Brain Mapping and Therapeutics (SBMT) from 2017 to 2019.

Dr. Razmjoo also specializes in a variety of advanced numerical methods and analyses including Finite Element Analysis (FEA). Prior to joining LISKE Accident & Injury Experts, Dr. Razmjoo was a research fellow at the Medical College of Wisconsin. One of his main responsibilities was to develop, test, and run finite element models of the human head and neck to study the effect of whiplash and vehicular accident, evaluate cervical spine artificial discs, and simulate orthopedic prosthesis. The results of his research have become part of a grant application. At the University of Wisconsin-Milwaukee where Dr. Razmjoo was a research fellow and instructor, he performed finite element analysis on human internal organs to study their reaction under high strain loading rates to assess the effect of blast loads on the human abdominal body.

## **B. Design, Manufacturing, and System Failures Expert**

Dr. Razmjoo has a wide range of expertise in the areas of mechanical system design, machine design, tools manufacturing, engineering materials, mechanics and strength of materials, fracture mechanics, elasticity, plasticity and stress analysis, infrastructure corrosion, properties of concrete, and rehabilitation of concrete structures.

Dr. Razmjoo holds Ph.D., M.Sc., and B.Sc. degrees in Mechanical Engineering. Dr. Razmjoo also holds a Ph.D. degree in Civil Engineering from Clemson University where he worked on the application of image processing and finite element analysis in modeling concrete chloride diffusion. The results of his studies were published in prestigious journals such as *Advances in Civil Engineering Materials*, *Journal of Materials in Civil Engineering*, *Construction and Building Materials*, and *Journal of Civil Engineering*.

Dr. Razmjoo has mentored graduate and undergraduate students and has thought engineering courses including “Introduction to statistics in engineering” and “Engineering designing and drawing”. At Griffin dewatering company as a research scientist, Dr. Razmjoo performed mechanical design of pressure vessels and piping plan layout and corrosion assessment and protection. At Partov Dadeh as a lead engineer, Dr. Razmjoo conducted fracture and failure analyses on different industrial devices such as ball-mill girth gear and reverb slag ladle. Dr. Razmjoo has also designed and manufactured a high-temperature graphite furnace and a transporting device for a fibers production plant.

[Click here to request the full CV of Dr. Razmjoo](#)