# Ashkan Heydarian

Tehran,Iran +989173159532 mail@ashkanheydarian.com www.ashkanheydarian.com https://ir.linkedin.com/in/ashkan-heydarian-1763b237



## **Education**

Degree	University	Discipline	Year
Ph.D. Degree	Science and Research Branch (IAU)	Bioengineering / Biomechanics	2013- 2019
Master Degree	Science and Research Branch (IAU)	Bioengineering / Biomechanics	2011- 2013
Bachelor Degree	Science and Research Branch (IAU)	Bioengineering / Biomechanics	2007- 2011

## **Work Experience**

Instructor and Researcher     Science and Research (IAU)     Biomechanics Department	2015 - Present
Co-Owner     Treata Tajhiz Fanavaran Pars     Medical Devices Manufacture Company	2021 - Present
Co-Owner     Fanavaran Treata Gostar     Medical Devices Import/ Export Company	2016 - Present
Co-Owner  Matin Kar Zayanderoud International Exhibition Host Company	2008 - Present
R&D Manager     Nick Kasht Asia     Dental Implants Manufacture Company	2013 - 2015
Business Manager     Setareh Kimia     Medical Devices PM and Quality Control	2008 - 2013
Business Manager     Jonoub Abr     PU Foam and Mattress Manufacture Company	2006 - 2012

# Certifications

Marketing Strategic Management, TÜV Rheinland

Industrial Calibration Methods, National Industrial Management

Sport Spirometry System, COSMED Italy

17025 Standard Management, IMQ Italy

Medical Device Quality Control, Academic Center for Education, Culture and Research (ACECR)

Cell Culture, Academic Center for Education, Culture and Research (ACECR)

## **Software and Skills**

Solid Works

**ANSYS** 

Python

Mathematica

**Mimics** 

**FEBio** 

Mendeley

#### **Publications**

ISI Publication

"Experimental and numerical responses of fibroblast and epithelial cells to the frequency of electric toothbrush," A. Heydarian, P. Darvishi, H. Mortazavi, and H. Mortazavy Beni, J Mech Behav Biomed Mater, vol. 140, 2023, doi: 10.1016/j.jmbbm.2023.105697.

"Short-term effects of X-ray on viscoelastic properties of epithelial cells," A. Heydarian, S. Khorramymehr, and B. Vasaghi-Gharamaleki, Proc Inst Mech Eng H, vol. 233, no. 5, 2019, doi: 10.1177/0954411919837563.

"Effects of X-ray on fibroblast mechanical properties," A. Heydarian, S. Khorramymehr, and B. Vasaghi-Gharamaleki, Journal of Theoretical and Applied Mechanics (Poland), vol. 57, no. 4, 2019, doi: 10.15632/jtam-pl/112456.

"An investigation of the viscoelastic behavior of MCF-10A and MCF-7 cells," A. Heydarian, D. Milani, and S. M. Moein Fatemi, Biochem Biophys Res Commun, vol. 529, no. 2, 2020, doi: 10.1016/j.bbrc.2020.06.010.

"The Effect of Short-Range Radiation of Type C and B Ultraviolet on the Mechanical Properties of Skin Fibroblasts," Amirhossein Azami, Ashkan Heydarian, Armin Jarrahi Khameneh, Siamak Khorramymehr, and Behnoosh Vasaghi\_Gharamaleki, Journal of Computational Applied Mechanics, vol. 50, no. 2, pp. 366–374, 2019.

# Conference Paper

- A Model Of Aquese Flow In The Posterior And Anterior Chamber Of The Human Eye (Electrical): "AAPOS & SNEC Joint Meeting - Singapore 2013"
- Effect of muscle fatigue during gait on kinematic of ankle joint, The second Iranian rehabilitation engineering: 1- Ashkan Heydarian 2- Sanaz mirzahosseini 3- Siyamak Khorramimehr (7-8 June 2012)
- Robotic Radio Surgery lecture at The first International Workshop of Climbing and Walking robots and Assistive Technology (CLAWAR december 11&12, 2011) as speaker
- Spine Decompression Therapy lecture at The 11th.Seminar in Specific Spinal Physical Therapy (28-29 December 2010) as speaker

## Projects and Under Rewiew Manuscripts

- Effects of Vitamin E and D on the Stiffness of MCF-7 (under rewiew in BioNanoScience)
- Investigation of Effect of High-heeled Shoes on Mediolateral Stability by Non-linear Dynamical System Modeling During the Gait. (under rewiew in The foot journal)
- Trends in Electrochemical Biosensors for the Early Diagnosis of Breast Cancer through the Detection of Relevant Biomarkers (under rewiew in Biochip journal)
- Is it curbing-spread of SARS-CoV-2 variants by considering non-linear predictive control? (under rewiew in Mathematical Methods in the Applied Sciences journal)

# **Teaching Skills**

Biomechanis lab, Motion Analysis Lab, Ergonimics and Human Factor, Bone Biomechanis and F racture, Introduction to Biomechanics (I and II), Introduction to rehabilitation Engineering, Kinesiology, Introduction to Radiology Devices, Industrial drawing and design, Statics (Sciense and Research branch of IAU since 2016)

## **Interests**

- Tissue mechanics
- Cell mechanics

**Ashkan Heydarian**