



نام و نام خانوادگی	محمد محجوب
مرتبه علمی	استاد
آدرس محل کار	---
تلفن	---
فکس	88013029-9821
پست الکترونیک	mmahjoob@ut.ac.ir
آدرس وب سایت	---

#### تحصیلات

- 1) دکتری، 1374، مهندسی مکانیک، دانشگاه واترلو
- 2) کارشناسی ارشد پیوسته، 1368، مهندسی مکانیک، دانشکده فنی دانشگاه تهران
- 3) کارشناسی، ---، مهندسی مکانیک، دانشکده فنی دانشگاه تهران

#### کتاب‌های تالیفی

- 1) محمد محجوب. "مقدمه ای بر کاربردهای هوش محاسباتی در پیش بینی." تهران: مؤسسه مطالعات و پژوهش های بازرگانی، 1393.

#### فصلی از کتاب

- 1) Milad Tatari, Mohammad Fard, Naser Nasrollahzadeh, and Mohammad Mahjoob. "Nonlinear Approaches in Engineering Applications
- 2." New York: Springer, 2014.

#### مقالات چاپ شده در نشریات بین المللی

- 1) Mohammad Mahjoob, H R Martin , and F Ismail . "IDENTIFICATION OF DAMPING AND STIFFNESS OF SMART STRUCTURES INCORPORATING ER FLUIDS." APPLIED ACOUSTICS 45, no. 3 (1995): 211-226.
- 2) S Bedi , F Ismail , Mohammad Mahjoob, and Y Chen . "Toroidal versus ball nose and flat bottom end mills." INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY 13, no. 5 (1997): 326-332.
- 3) Mohammad Mahjoob. "Crack location in pipes using modal frequencies and FEM." Transaction On Mechanics: TOM 50 vol 64 50, no. 64 (2005): 313-318.
- 4) Mohammad Mahjoob. "Crack detection in pipes filled with fluid using natural frequencies." Transaction on Mechanics: TOM 50 vol 64 50, no. 64 (2005): 307-312.
- 5) N Rahimi , H Sadeghi , and Mohammad Mahjoob. "Performance of the geometric approach to fault detection and isolation in SISO, MISO, SIMO and MIMO systems." Journal of Zhejiang University-SCIENCE A 8, no. 9 (2007): 1443-1451.
- 6) Hojat Ahmadi, Mohammad Mahjoob, Roozbeh Abaszadeh , Ali Rajabi Pour, and Moslem Delshad . "Prediction of Watermelon Consumer Acceptability based on Vibration Response Spectru." World Academy of Science, Engineering and Technology 54, no. --- (2007): 669-672.
- 7) هانی اشرفی , Mohammad Mahjoob. "Noise reduction of hand - held vacuum cleaners." Acoustics Bulletin 32, no. 6 (2007): 23-29 , and
- 8) Mohammad Mahjoob, Nader Mohammadi, and Sadegh Malakuti. "An investigation into the acoustic insulation of triple layered panels containing Newtonian fluids: Theory and experiment." APPLIED ACOUSTICS 70, no. 1 (2009): 165-171.
- 9) نادر محمدی , Mohammad Mahjoob. "Transmission loss of multilayer panels containing Newtonian fluids using progressive wave model : Comparison with impedance progressive model and experiments." COMPTES RENDUS MECANIQUE 337, no. 4 (2009): 198-207 , and
- 10) Mohammad Mahjoob, Nader Mohammadi , and Sadegh Malakooti . "An investigation into the acoustic insulation of triple - layered panels containing Newtonian fluids : Theory and experiment." APPLIED ACOUSTICS 70, no. 1 (2009): 165-171.

- model : Comparison with impedance progressive model and experiments." *COMPTES RENDUS MECANIQUE* 337, no. 4 (2009): 198-207.
- 11) Mohammad Mahjoob, and نادر محمدی . "Transmission loss of multilayer panels containing a fluid using progressive wave
- model : Comparison with impedance progressive model and experiments." *COMPTES RENDUS MECANIQUE* 337, no. 4 (2009): 198-207.
- 12) Mohammad Mahjoob, and نادر محمدی . "Transmission loss of multilayer panels containing a fluid using progressive wave
- 13) Nasim Salehi-nik, Rahmat Sotudeh Gharebagh, Navid Mostoufi, Reza Zarghami, and Mohammad Mahjoob. "Determination of hydrodynamic behavior of gas-solid fluidized beds using statistical analysis of acoustic emissions." *INTERNATIONAL JOURNAL OF MULTIPHASE FLOW* 35, no. 11 (2009): 1011-1016.
- 14) Mojgan Abbasi, Rahmat Sotudeh Gharebagh, Navid Mostoufi, and Mohammad Mahjoob. "Non - intrusive monitoring of bubbles in a gas - solid fluidized bed using vibration signature analysis." *POWDER TECHNOLOGY* 196, no. 3 (2009): 278-285.
- 15) Mehdi Jafari , and Mohammad Mahjoob. "An Exact Three-Dimensional Beam Element With Nonuniform Cross Section." *JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME* 77, no. 6 (2010): -.
- 16) Mohammadreza Kolahtouz, and Mohammad Mahjoob. "A REINFORCEMENT LEARNING APPROACH TO DYNAMIC OBJECT MANIPULATION IN NOISY ENVIRONMEN." *International Journal of Innovative Computing Information and Control* 6, no. 4 (2010): 1615-1622.
- 17) Majid Abdolazadeh, Mohammad Mahjoob, , and Arash Miranian. "LOCALLY LINEAR NEURO - FUZZY ( LLNF ELECTRICITY PRICE FORECASTING IN DEREGULATED POWER MARKETS." *International Journal of Innovative Computing Information and Control* 6, no. 9 (2010): 4203-4218.
- 18) Nader Mohammadi, Mohammad Mahjoob, Babak Kaffashi, and Sadegh Malakuti. "An experimental evaluation of pre - yield and post - yield rheological models of magnetic field dependent smart materials." *Journal of Mechanical Science and Technology* 24, no. 9 (2010): 1829-1837.
- 19) Ramin Oftadeh, and Mohammad Mahjoob. "A novel meta heuristic optimization algorithm inspired by group hunting of animals: Hunting search." *COMPUTERS & MATHEMATICS WITH APPLICATIONS* 60, no. 7 (2010): 2087-2098.
- 20) Morteza Taghipour, Mohammad Mahjoob, and Mansour Nikkhaheh Bahrami. "A TMD DESIGN APPROACH FOR REDUCTION OF ACCELERATION AND JERK USING H2 SYNTHESIS." *International Journal of Innovative Computing Information and Control* 6, no. 10 (2010): 4663-4674.
- 21) Sadegh Malakuti, Nader Mohammadi, Mohammad Mahjoob, and Korosh Mohammadi . "IDENTIFICATION OF ADHESIVE BOND IN A MULTI - LAYERED STRUCTURE VIA SOUND INSULATION CHARACTERESTICS." *JOURNAL OF MECHANICS* 26, no. 3 (2011): 363-372.
- 22) H Azizpour , Rahmat Sotudeh Gharebagh , Reza Zarghami, M Abbasi , N Mostoufi , and Mohammad Mahjoob. "Characterization of gas-solid fluidized bed hydrodynamics by vibration signature analysis." *INTERNATIONAL JOURNAL OF MULTIPHASE FLOW* 37, no. 7 (2011): 788-793.
- 23) Saeed Hashemnia, Mohammad Reza Sahebhasagh, Akbar Allahverdizadeh, Mohammad Mahjoob, and Ahmad Feyz Dizji. "Bifurcation and Chaos Control in Thin Circular Functionally Graded Plates." *Nonlinear Engineering Modeling and Application* 1, no. 3-4 (2012): 49-57.
- 24) Roozbeh Abbaszadeh, Ali Rajabi Pour, Mohammad Mahjoob, Mojtaba Delshad, and Hojat Ahmadi. "Evaluation of watermelons texture using their vibration responses." *BIOSYSTEMS ENGINEERING* 115, no. 1 (2013): 102-105.
- 25) Akbar Allahverdizadeh, Mohammad Mahjoob, , and Naser Nasrollahzadeh. "On the vibration behavior of functionally graded electrorheological sandwich beams." *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES* 70, no. 70 (2013): 130-139.
- 26) Akbar Allahverdizadeh, Mohammad Mahjoob, Naser Nasrollahzadeh, and Iman Eshraghi. "Optimal parameters estimation and vibration control of a viscoelastic adaptive sandwich beam incorporating an electrorheological fluid layer." *JOURNAL OF VIBRATION AND CONTROL* 6, no. 22 (2013): 1-6.
- 27) Akbar Allahverdizadeh, Mohammad Mahjoob, Mohammad Hasan Naei, Mohammad Hadi Maleki, and Naser Nasrollahzadeh. " Structural modeling, vibration analysis and optimal viscoelastic layer characterization of adaptive sandwich beams with electrorheological fluid core." *MECHANICS RESEARCH COMMUNICATIONS* 51, no. 51 (2013): 15-22.

- 28) Behnam Dadashzadeh, Mohammad Mahjoob, and Mansour Nikkhaheh Bahrami. "Compliant Leg Architectures and a Linear Control Strategy for the Stable Running of Planar Biped Robots." *International Journal of Advanced Robotic Systems* 2, no. 11 (2013): 11-21.
- 29) Mohammad Ghadami, Mohammad Mahjoob, Hooman Shagoshtaspi, and Y.k. Lee. "Model-based feedback control of a microfluidic electroporation system." *JOURNAL OF MICROMECHANICS AND MICROENGINEERING* 23, no. 12 (2013): 1-10.
- 30) Akbar Allahverdizadeh, Iman Eshraghi, Mohammad Mahjoob, and Naser Nasrollahzadeh. "Nonlinear vibration analysis of FGER sandwich beams." *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES* 78, no. 1 (2014): 167-176.
- 31) Mahdi Akraminia, Mohammad Mahjoob, and Milad Tatari. "Active noise control using adaptive POLYnomial Gaussian WinOwed wavelet networks." *JOURNAL OF VIBRATION AND CONTROL* 22, no. 1 (2014): 1-14.
- 32) Saeed Hashemnia, Masoud Shariat Panahi, and Mohammad Mahjoob. "Unmanned bicycle balancing via Lyapunov rule-based fuzzy control." *MULTIBODY SYSTEM DYNAMICS* 31, no. 2 (2014): 147-168.
- 33) Behnam Dadashzadeh, Mohammad Mahjoob, Mansour Nikkhaheh Bahrami, and Chris Macnab. "Stable active running of a planar biped robot using Poincare map control." *ADVANCED ROBOTICS* 28, no. 4 (2014): 231-244.
- 34) Seyed Mehdi Ansary Movahhed, Masoud Shariat Panahi, Hussein Ziarati, and Mohammad Mahjoob. "Optimal energy management in a dual-storage fuel-cell hybrid vehicle using multi-dimensional dynamic programming." *JOURNAL OF POWER SOURCES* 250, no. 250 (2014): 359-371.
- 35) Roozbeh Abbaszadeh, Ali Rajabi Pour, Hassan Sadrnia, Mohammad Mahjoob, Mojtaba Delshad, and Hojat Ahmadi. "Application of modal analysis to the watermelon through finite element modeling for use in ripeness assessment." *International Journal of Food Engineering* 127, no. 1 (2014): 80-84.
- 36) Akbar Allahverdizadeh, Ramin Oftadeh, Mohammad Mahjoob, and Mohammad Hasan Naei. "Homotopy Perturbation Solution and Periodicity Analysis of Nonlinear Vibration of Thin Rectangular Functionally Graded Plates." *ACTA MECHANICA SOLIDA SINICA* 27, no. 2 (2014): 210-220.
- 37) Akbar Allahverdizadeh, Mohammad Mahjoob, Naser Nasrollahzadeh, and Iman Eshraghi. "Investigation of Functionally Graded and Viscoelastic Layers Effects on the Dynamic Behavior of FGER Sandwich Beams." *MECHANICS OF ADVANCED MATERIALS AND STRUCTURES* 11, no. 2 (2014): 00-00.
- 38) Mahdi Akraminia, Mohammad Mahjoob, and Mohammad Ghadami. "Nonlinear active noise control using adaptive rational functions with second-order poles frames: Simulation and experimental results." *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE* 15, no. 229 (2014): 1-17.
- 39) Mahdi Roozegar, Mohammad Mahjoob, and Mohsen Jahromi. "DP-based path planning of a spherical mobile robot in an environment with obstacles." *JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS* 351, no. 10 (2014): 4923-4938.
- 40) Mahdi Akraminia, and Mohammad Mahjoob. "Adaptive feedback active noise control using wavelet frames: simulation and experimental results." *JOURNAL OF VIBRATION AND CONTROL* 14, no. 20 (2014): 1-19.
- 41) Roozbeh Abbaszadeh, Ali Rajabi Pour, Mohammad Mahjoob, Mohaddeseh Mikani, Hojat Ahmadi, and Mojtaba Delshad. "Nondestructive assessment of watermelon flesh color by laser vibrometry." *Engineering in Agriculture, Environment and Food* 8, no. 1 (2015): 33-37.
- 42) Nader Naghavi, and Mohammad Mahjoob. "Design and control of an active 1-DoF mechanism for knee rehabilitation." *Disability and rehabilitation. Assistive technology* 1, no. 1 (2015): 1-7.
- 43) Mahdi Akraminia, Mohammad Mahjoob, and Amir Hossain Niazi. "Feedforward active noise control using wavelet frames: simulation and experimental results." *JOURNAL OF VIBRATION AND CONTROL* 1, no. 1 (2015): 1-17.
- 44) Mahdi Roozegar, Mohammad Mahjoob, Mohammad Javad Esfadiari, and Masoud Shariat Panahi. "XCS-based reinforcement learning algorithm for motion planning of a spherical mobile robot." *APPLIED INTELLIGENCE* 1, no. 1 (2016): 1-11.
- 45) Mahdi Roozegar, Mohammad Mahjoob, and Mohsen Jahromi. "Optimal motion planning and control of a nonholonomic spherical robot using dynamic programming approach: simulation and experimental results." *MECHATRONICS* 39, no. 39 (2016): 174-184.

- 46) Mahdi Roozgar, and Mohammad Mahjoob. "Modelling and control of a non-holonomic pendulum-driven spherical robot moving on an inclined plane: simulation and experimental results." IET Control Theory and Applications 11, no. 4 (2017): 541-549.
- 47) Mehdi Roozgar, Mohammad Mahjoob, and Moosa Ayati. "Adaptive estimation of nonlinear parameters of a nonholonomic spherical robot using a modified fuzzy-based speed gradient algorithm." Regular and Chaotic Dynamics 22, no. 3 (2017): 226-238.
- 48) Mohammad Reza Lavaei, Mohammad Mahjoob, and Amir Behjat. "Stiffness control of a legged robot equipped with a serial manipulator in stance phase." Journal of computational applied mechanics 48, no. 1 (2017): 27-38.
- 49) Saaed Hashemnia, Masoud Shariat Panahi, and Mohammad Mahjoob. "CONTINUOUS-ACTION XCSR WITH DYNAMIC REWARD ASSIGNMENT DEDICATED TO CONTROL OF BLACK-BOX MECHANICAL SYSTEMS." ASIAN JOURNAL OF CONTROL 20, no. 1 (2018): 356-369.
- 50) Akbar Mazrae Farahani, and Mohammad Mahjoob. "Modal Analysis of a Non-rotating Inflated Tire using Experimental and Numerical Methods." international journal of engineering innovation & research(IJEIR) 7, no. 1 (2018): 15-21.
- 51) Amir Ostadi Moghaddam, Mohammad Mahjoob, and Ara Nazarian. "Bone Remodeling under Vibration: A Computational Model of Bone Remodeling Incorporating the Modal Behavior of Bone." JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME 140, no. 12 (2018): 121003.
- 52) Pouya Doosti, Mohammad Mahjoob, and Bahnam Dadashzadeh. "Finite-time control strategy for the running of a telescopic leg biped robot." Journal of the Brazilian Society of Mechanical Sciences and Engineering 41, no. 4 (2019): 1-10.

#### مقالات چاپ شده در نشریات داخلی

- 1) Naser Rahimi , Morteza Sadeghi , and Mohammad Mahjoob. "Geometric approach to fault detection and isolation in multivariate structural systems An experimental investigation." Aerospace Mechanics Journal 5, no. 2 (2009): 77-87.
- 2) محمد محجوب. "نقص یابی سازه ها با استفاده از نتایج آزمایش مودال." نشریه مهندسی مکانیک ایران ، 1261 و 1268 (1378): -.
- 3) محمد محجوب و علی ابوالقاسمی ازاد . "طراحی یک شتاب سنخ خازنی MEMS." نشریه دانشکده فنی دانشگاه تهران 39، 6 (1384): 745-752.
- 4) علی رستمی شهسواری و محمد محجوب. "موقعیت یابی ترک در لوله با استفاده از اطلاعات تجربی مودال." مجله بین المللی علوم مهندسی 1، 18 (1386): 93-99.
- 5) امیر شیخی، رحمت ستوده قره باغ، نوید مستوفی، رضا ضرغامی و محمد محجوب. "تعیین مشخصه های هیدرودینامیکی بسترهای سیال سه فازی به کمک پایش نوسان های ارتعاش." شیمی و مهندسی شیمی ایران 30، 4 (1390): 43-54.
- 6) نوید مشتاقی یزدانی و محمد محجوب. "بررسی مقایسه ای کارایی روش هایی بر پایه تکنیک های هوش مصنوعی در تشخیص عیوب سیستم های مکانیکی." نشریه علمی ترویجی صوت و ارتعاش 6، 12 (1396): 41-56.

#### همایش های بین المللی

- 1) Mansour Nikkhaheh Bahrami , and Mohammad Mahjoob. "Gear fault detection using wavelet packet." International Mechanical Engineering Conference, Kuwait.
- 2) Mohammad Mahjoob. "The design optimization of a MEMS accelerometer for automotive navigation systems." International Conference on Mechatronics: ICOM05, Kuala Lumpur.
- 3) Mohammad Mahjoob. "An optimized controller applied to a typical light tracker system." International Conference on Mechatronics: ICOM05, Kuala Lumpur.
- 4) Mohammad Mahjoob. "Crack detection in pipes using changes of natural frequencies." ICRAMME 2005, Kuala Lumpur.
- 5) Mohammad Mahjoob. "Effect of loudspeaker membrane geometry on its frequency response." ICSV-12, Lisbon.
- 6) Mohammad Mahjoob. "Active tracking using a modified mean-shift algorithm for vision and a GA-tuned PID for control." Ninth International Conference on Mechatronics Technology: ICMT 2005, Kuala Lumpur.
- 7) Mohammad Mahjoob. "Fuzzy control of a double inverted pedulum on a rotary base using LQRto drive ruelles and scaling factors." International Conference on Mechatronics Technology: ICMT2005, Kuala Lumpur.
- 8) Mohammad Mahjoob. "Gear fault detecion using time synchronous averaging and amplitude demodulation of vibration signal." International Conference on Mechatronics Technology: ICMT2005, Kuala Lumpur.

- 9) Mohammad Mahjoob. "Dynamic modeling of a twin-hall USV." International Conference on Mechatronics Technology, India.
- 10) Mohammad Mahjoob, and . "Modeling ER/MR-based smart panels for noise and acoustic treatment." International Conf. on Modeling and Simulation: MS2006, Kualalumpur.
- 11) Mohammad Mahjoob, and . "Engine valve fault detection using vibration signature analysis." International Conf. on Modeling and Simulation: MS2006, Kualalumpur.
- 12) Mohammad Mahjoob, and . "Network control of a light tracker." AUS-ISM06, Shareja.
- 13) Seyed Mehdi Ansarey Movahhed, and Mohammad Mahjoob. "Trajectory control of automated guided liftfork truck using feedback linearization." ASME- ESDA2006, Torino.
- 14) Mohammad Poursina, Mohammad Mahjoob, and . "Optimal H-infinity control of ship heading." ASME- ESDA2006, Torino.
- 15) , Abbas Rastgo Ghamsari, and Mohammad Mahjoob. "A simple method for mechanical modeling of bicycle for optimum stability and control." International Conf. on Modeling and Simulation: AMSE2006, Konya.
- 16) Abbas Rastgo Ghamsari, Mohammad Mahjoob, and . "A SIMPLE METHOD FOR MATHEMATICAL AND MECHANICAL MODELING OF BICYCLE FOR OPTIMUM STABILITY AND CONTROL OF BICYCLE PARAMETERS." International Conference on Modeling and Simulation 2006, Konya.
- 17) Mohammad Mahjoob, and Hani Ashrafi. "Noise reduction of handheld vacuum cleaners by geometric optimization of components." ISMA2006, Leuven.
- 18) Mohammad Mahjoob, and . "Vibration signature analysis for engine condition monitoring and diagnosis." ISMA2006, Leuven.
- 19) Mohammad Poursina, and Mohammad Mahjoob. "LQR-based fuzzy control of ship maneuvering." AUS-ISM06, Shareja.
- 20) Farnood Gholami, Mohammad Mahjoob, and Hamed Habibi. "Kinematics and dynamics of a three wheeled mobile robot." 4th. international symposium on mechatronics and its applications : ISM07, Sharjah.
- 21) Mohammad Mahjoob, Ali Shahsavari, and . "A vibration based damage detection method for pipes conveying fluid." 48th. AIAA/ASCE/AHS/ASC Structures, structural dynamics, and materials conference, Honolulu.
- 22) Mohammad Mahjoob, and Mahdi Taimuri. "Operational modal analysis applied to a horizontal washing machine: A comparative approach." International Modal Analysis Conference: IOMAC, Copenhagen.
- 23) Mohammad Mahjoob, and . "Draft tube surge detection in Francis hydroturbines using bispectrum analysis." IEEE International Conf. on Mechatronics and Automation: ICMA 2007,.
- 24) Farzad Shirazi, and Mohammad Mahjoob. "An investigation of parameters in ant colony optimization for a path optimization algorithm." IEEE International Conf. on Mechatronics and Automation: ICMA 2007,.
- 25) Behnam Dadashzadeh, and Mohammad Mahjoob. "Fuzzy logic control vs. nonlinear P control of a three wheeled mobile robot: TWMR." IEEE International Conf. on Mechatronics and Automation : ICMA 2007,.
- 26) , and Mohammad Mahjoob. "On optimum number of agents for tracking a minimum path in ant colony optimization applications." 13th. IEEE IFAC International Conference on Methods and Models in Automation and Robotics: MMAR2007, Szczecin.
- 27) Alireza Gholami, and Mohammad Mahjoob. "A robust control approach towards MR based semi-active suspensions." 13th. IEEE IFAC International Conference on Methods and Models in Automation and Robotics: MMAR2007, Szczecin.
- 28) , , and Mohammad Mahjoob. "An experimental investigation of geometric approach to fault isolation in multivariate dynamic systems." 13th. IEEE IFAC International Conference on Methods and Models in Automation and Robotics: MMAR2007, Szczecin.
- 29) Farzad Shirazi, and Mohammad Mahjoob. "Application of discrete wavelet transform (DWT) in combustion failure detection of IC engines." IEEE 5th. International Symposium on Image and Signal Processing and Analysis, Istanbul.
- 30) Mohammad Mahjoob, , , and . "Chaotic Time Series Locally Quadratic Fuzzy Neural Model for Time Series Forecasting." International conference on fuzzy systems FS08, Sofia.
- 31) , Mohammad Mahjoob, and . "Neuro-fuzzy air pollution forecasting." International Conference on Mechanical Engineering ISME 2008, Kerman.

- 32) Mohammad Mahjoob, , and . "GA based optimized LS-SVM forecasting of short term electricity price in competitive power markets." IEEE conference on industrial electronics IEEE ICIEA 2008,.
- 33) Mohammad Mahjoob, , , and . "An experimental study of Sound Transmission Loss STL measurement techniques using an impedance tube." Acoustic 08, Paris.
- 34) Mohammad Mahjoob, , and . "Experimental investigation of transmission loss of a doubled-layer panel containing a fluid." International conference on noise and vibration engineering ISMA2008, Leuven.
- 35) Mohammad Mahjoob, and . "Acoustic simulation of building spaces by ray tracing method predictions vs experimental results." Int conference on noise and vibration engineering ISMA2008, Leuven.
- 36) Mohammad Mahjoob, and . "A simulation of ant formation and foraging using fuzzy logic and reinforcement learning." IEEE International Conference on Cybernetics and Intelligent Systems CIS 2008, Chengdu.
- 37) Mohammad Mahjoob, , and Majid Nili Ahmad Abadi. "A reinforcement learning approach to dynamic object manipulation in noisy environment." Int Symposium on computational intelligence and industrial applications ISCIIA 2008,.
- 38) Mohammad Mahjoob, and Mohammad Dehghani. "A modified serpenoid equation for snake robots." IEEE Int Conf on robotics and biomimetics ROBIO 2008, Bankuk.
- 39) Mohammad Mahjoob, , and Masoud Shariat Panahi. "Fault classification in gears using support vector machines SVMs and signal processing." Soft Computing Computing with Words and Perceptions in System Analysis Decision and Control 2009. ICSCCW 2009. Fifth International Conference on, Famagusta.
- 40) Mohammad Mahjoob, and . "Bee colony algorithm for real-time optimal path planning of mobile robots." This paper appears in Soft Computing Computing with Words and Perceptions in System Analysis Decision and Control 2009. ICSCCW 2009. Fifth International Conference on, Famagusta.
- 41) , Mohammad Mahjoob, , and . "Ozone concentration forecasting with neuro-fuzzy approaches." 5th International Conference on Soft Computing Computing with Words and Perceptions in System Analysis Decision and Control ICSCCW 2009, Famagusta.
- 42) Mohammad Mahjoob, and . "Effect of Incremental Driving Motion on a Vision-Based Path Planning of a Spherical Robot." Computer and Electrical Engineering 2009. ICCEE 09. Second International Conference on, Dubai.
- 43) Mohammad Mahjoob, , , and . "A motion planning for toppling-motion of a TET walker." Computer and Automation Engineering ICCAE 2010 The 2nd International Conference on, Singapore.
- 44) Saeed Hashemnia, and Mohammad Mahjoob. "Human-like passing under obstacles for biped robots." 18th Annual International Conf. on Mechanical Engineering-ISME2010, Tehran.
- 45) , and Mohammad Mahjoob. "A NEW STRUCTURAL OPTIMIZATION METHOD BASED ON GROUP HUNTING OF ANIMALS: HUNTING SEARCH (HUS)." ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis: ESDA2010, Istanbul.
- 46) , Mohammad Mahjoob, and . "WALKING GAIT OF A SINGLE-TETRAHEDRAL ROBOT: DESIGN MODELING AND IMPLEMENTATION." ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis: ESDA2010, Istanbul.
- 47) , Mohammad Mahjoob, and . "Experimental and Numerical Study of Cavitation in Centrifugal Pumps." ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis: ESDA2010, Istanbul.
- 48) , Mohammad Mahjoob, and . "Dammage detection in a composite plate using modal analysis and artificial intelligence." The 2nd International Conference on Composites: Characterization Fabrication and Application (CCFA-2, Kish Island.
- 49) , Ali Rajabi Pour, Hojat Ahmadi, Mohammad Mahjoob, and Mojtaba Delshad. "Nondestructive evaluation of watermelon ripeness using LDV." Food Engineering 2011, Athens.
- 50) , Ali Rajabi Pour, Hojat Ahmadi, Mohammad Mahjoob, and Mojtaba Delshad. "Assessment of Watermelon Quality Using Vibration Spectra." First International Conference INCT 2011, Tehran.
- 51) , Ali Rajabi Pour, Mojtaba Delshad, Mohammad Mahjoob, and Hojat Ahmadi. "Watermelon quality determination by laser vibrometry." 7th International Postharvest Symposium, Kuala Lumpur.



- 52) Navid Mohajer, and Mohammad Mahjoob. "Mechanical and Electrical Optimization of a Piezoelectric-based Vibration Energy Harvesting System." First RSI/ISM International Conference on Robotics and Mechatronics: IEEE ICRoM 2013, Tehran.
- 53) , , and Mohammad Mahjoob. "Comparative Study of PID Control and Model Predictive Control for a Microfluidic Electroporation System." IEEE international conference on Nano/Micro Engineered and Molecular Systems, Suzhou.
- 54) Mohammad Javad Esfadiari, Mahdi Roozegar, Masoud Shariat Panahi, and Mohammad Mahjoob. "Motion planning of a spherical robot using eXtended Classifier Systems." 21st Iranian Conf. on Electrical Engineering (ICEE) 2013, Mashhad.
- 55) Mahdi Roozegar, Mohammad Mahjoob, and Ali Shafiekhani. "Using dynamic programming for path planning of a spherical mobile robot." Scientific Cooperations International Conferences in Electrical and Electronics Engineering: ACE 2013, İSTANBUL.
- 56) Ali Shafiekhani, Mohammad Mahjoob, and Mahdi Roozegar. "Adaptive neuro-fuzzy control of an unmanned bicycle." Scientific Cooperations International Conferences in Electrical and Electronics Engineering: ACE 2013, İSTANBUL.
- 57) Mohammad Mahjoob, and Ehsan Abbasi. "Fuzzy LQR controller for heading control of an unmanned surface vessel." Scientific Cooperations International Conferences in Electrical and Electronics Engineering: ACE 2013, İSTANBUL.
- 58) Ehsan Abbasi, and Mohammad Mahjoob. "Controlling of Quadrotor UAV for tuning the PID gains in hovering mode." Scientific Cooperations International Conferences in Electrical and Electronics Engineering: RARM 2013, İSTANBUL.
- 59) Ehsan Hasanabadi, Mohammad Mahjoob, and Mohammad Reza Sabaapour. "A Novel Algorithm for Trajectory Tracking Control of a Snake Robot." 22nd International Conference on Mechanical Engineering, ISME 2014, Tehran.
- 60) Ehsan Abbasi, Mohammad Mahjoob, and Ali Shafiekhani. "Attitude Control Using an Extended Calssifier System Algorithm for Offline Auto-Tuning of a PID Controller." Second RSI/ISM International Conference on Robotics and Mechatronics: ICRoM 2014, Tehran.
- 61) Seyed Mostafa Motahari-bidgoli, Mohammad Mahjoob, and Sheyda Davaria. "Simulation and analysis of a TET-walker robot motion." Second RSI/ISM International Conference on Robotics and Mechatronics (ICRoM), 2014, Tehran.
- 62) Anahita Jamshidnejad, Bart Bart De Schutter, and Mohammad Mahjoob. "Urban traffic control using a fuzzy multi-agent system." Control Conference (ECC), 2015 European, Linz.
- 63) Amir Ostadi Moghaddam, Mohammad Mahjoob, and Ara Nazarian. "Assigning Material Properties to Finite Element Models of Bone: A New Approach Based on Dynamic Behavior." The 7th International Conference on Computational Methods (ICCM2016), California.
- 64) Sasan Paryad Zanjani, Mohammad Mahjoob, Saeid Amakpour, Raheleh Keirbakhsh, and Mehran Haji Akhoundzadeh. "A Supplemental Treatment for Chemotherapy: Control Simulation Using a Mathematical Model with Estimated Parameters Based on in Vivo Experiment." 6th IFAC Conference on Foundations of Systems Biology in Engineering: FOSBE 2016, Berlin.
- 65) Afshin Alipour, and Mohammad Mahjoob. "A rehabilitation robot for continuous passive motion of foot inversion-eversion." Robotics and Mechatronics (ICROM), 2016 4th International Conference on, Tehran.
- 66) Aria Shabani, and Mohammad Mahjoob. "Bio-signal interface for knee rehabilitation robot utilizing EMG signals of thigh muscles." Robotics and Mechatronics (ICROM), 2016 4th International Conference on, Tehran.
- 67) Mohammad Reza Lavaei, Mohammad Mahjoob, and Amir Behjat. "Derivation of the constraint equations in the kinematic modeling of legged robots with rigid semi-spherical feet." 18th International Conference on Advanced Robotics (ICAR), 2017, Hong Kong.
- 68) Negin Nikafrooz, Mohammad Mahjoob, and Mohamad Ali Tofigh. "Design, Modeling, and Fabrication of a 3-DOF Wrist Rehabilitation Robot." 2018 6th RSI International Conference on Robotics and Mechatronics (ICRoM), Tehran.
- 69) ناصر رحیمی، مرتضی همایون صادقی و محمد مجوب. "آشکارسازی و جداسازی عیب به روش هندسی در سیستمهای دینامیکی چندمتغیره." کنفرانس بین المللی مهندسی مکانیک، تهران.
- 70) ناصر رحیمی، مرتضی صادقی و محمد مجوب. "آشکارسازی و جداسازی عیب در چرخنده به روش هندسی با استفاده از ورودی و خروجی های چندگانه." شانزدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME 2008، کرمان.
- 71) محمد مجوب، مجید عبدالله زاده و رضا زرین قلم. "شناسایی و تخمین سیستمهای غیرخطی با استفاده از مدل نوروفازی خطی-محلی." شانزدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME 2008، کرمان.

72) محمد محجوب، مجید عبدالله زاده، رضا زرین قلم و علی سلیمانی. "تشخیص عیب در توربین آبی با استفاده از پردازش سیگنال و ماشینهای بردار پشتیبان." هفدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME 2009، تهران.

73) محمد محجوب، علی سلیمانی و مسعود شریعت پناهی. "تشخیص عیوب چرخنده با استفاده از پردازش سیگنال ارتعاشی و ANFIS." هفدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME 2009، تهران.

74) محمد محجوب، مجید عبدالله زاده و رضا زرین قلم. "شناسایی دینامیک غیرخطی چند ورودی-چند خروجی دیگ بخار با استفاده از مدل wavenet." هفدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME 2009، تهران.

75) حسین وحید علیزاده و محمد محجوب. "تحلیل سینماتیکی ربات کروی و مسیریابی آن به کمک پردازش تصویر." هیجدهمین کنفرانس سالانه بین المللی مهندسی مکانیک ISME2010، تهران.

76) محمد محجوب و نوید مشتاقی یزدانی. "طراحی یک سیستم هوشمند در پردازش گفتار فارسی جهت تشخیص احساسات." پنجمین کنفرانس بین المللی آکوستیک و ارتعاشات، تهران.

#### همایش های داخلی

1) Sajjad Rahmatian, Mohammad Mahjoob, and Mohammad Reza Hanachi. "Continuous estimation of ankle joint angular position based on the myoelectric signals." Artificial Intelligence and Robotics (IRANOPEN), 2016, Tehran.

2) محمد محجوب. "تست و ارزیابی آلودگی صوتی ناشی از ترافیک." سیزدهمین کنفرانس بین المللی مهندسی مکانیک، اصفهان.

3) روزبه عباس زاده، علی رحیمی پور، حجت احمدی، محمد محجوب و مجتبی دلشاد. "ارزیابی غیر مخرب رسیدگی هندوانه با استفاده از ال دی وی." ششمین کنگره ملی مهندسی ماشین های کشاورزی و مکانیزاسیون، کرج.

4) عرفان نیازی، محمد محجوب، علیرضا ریاسی و سیامک سلیمی. "بررسی و مقایسه عددی توربین آبی 13 و 15 پره نیروگاه عباسپور از نظر کارکرد و میزان کاویتاسیون." تجهیزات دوار در نفت و گاز، تهران.

5) سید محمد محسن مدرس قمصری، محمد محجوب و مسعود مسیح تهرانی. "طراحی ترنز بازیاب یک خودروی سنگین کشنده هیبرید الکتریکی." کنفرانس بین المللی مهندسی مکانیک و فناوریهای پیشرفته، اصفهان.

6) نوید مشتاقی یزدانی و محمد محجوب. "طراحی یک سیستم هوشمند به منظور پایش سلامت بلبرینگ ها در موتور القایی." سومین کنفرانس بین المللی ارتعاشات و آکوستیک ایران: ISAV 2013، تهران.

7) سجاد رحمتیان، محمد محجوب و محمدرضا حناچی. "کنترل موقعیت مفاصل مچ و زانو بر اساس سیگنال های الکترومایوگرافی." اولین کنفرانس بین المللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر، تهران.

#### راهنمایی پایان نامه

1) طراحی و ساخت رویات توانبخشی مفصل مچ دست انسان، عباس مولودی، دانشگاه تهران، 1394/10/29

2) مدلسازی، تحلیل و کنترل رویات توان بخشی حرکتی پایین تنه، افشین علی پور، دانشگاه تهران، 1395/04/21

3) کنترل پروتز پا با استفاده از سیگنال های الکترومایوگرافی، سجاد رحمتیان، دانشگاه تهران، 1395/06/14

4) تفکیک عیب و تغییر در شرایط عملکردی در پایش سلامتی سازه با استفاده از روش های آنالیز رگرسیون مقاوم، محمدحسین قاسمی، دانشگاه تهران، 1395/06/14

#### فعالیت های اجرایی

1) نایب رییس انجمن آکوستیک و ارتعاشات ایران، 1389/07/14، 1393/06/28، ایران، تهران

2) معاون پژوهشی و تحصیلات تکمیلی، 1393/11/13، 1396/03/11، ایران، تهران

3) دبیر (رییس) کنفرانس بین المللی آکوستیک و ارتعاشات 1395/09/04، 1394/09/04، ISAV 2015، ایران، تهران

4) مدیر گروه مهندسی مکاترونیک، 1394/12/15، 1395/04/24، ایران، تهران

#### عضویت در مجامع ملی و بین المللی

1) انجمن مهندسان مکانیک، عضو، بین المللی، 1368/10/11، 1394/09/22

2) انجمن کنترل و ابزار دقیق ایران، عضو، ملی، 1380/04/22

3) انجمن آکوستیک و ارتعاشات ایران، عضو هیات موسس، بین المللی، 1393/04/11