

Curriculum Vitae

Moein Nazifi

314 James J. Cain 51 Bldg, Texas A&M University

College Station, TX 77843-3123, USA

moeinnazifi@tamu.edu

<http://hurgroup.net/members>

<https://www.linkedin.com/in/moein-nazifi-992ba7128/>

RESEARCH INTERESTS:

- Rehabilitation Robotics
- Biomechanics of Human GAIT
- Postural Control
- Control Systems Design

EDUCATION:

- Texas A&M University**, College Station TX, USA
Ph.D. in Mechanical Engineering
2013-Present Field: Rehabilitation Robotics, Muscle synergies, Motor Control, GAIT analysis
Advisor: Prof. Pilwon Hur
Committees: Prof. Sivakumar Rathinam, Prof. Michael Madigan, Prof. John Buchanan
- Sharif University Of Technology**, Tehran, Iran
B.Sc. in Mechanical Engineering
Field: Robotics
2008- 2013 Advisors: Prof. Saeed Behzadipour, Prof. Hassan Saeedi
Committees: Prof. Mohammad Durali, Prof. Farzam Farahmand, Prof. Navid Arjmand
Thesis: "Forward and inverse kinematics and vibration analysis of a Cartesian robot in harsh environment, Optimization by adding bead rope"
- Mofid High School**, Tehran, Iran
2004-2008 **High School Diploma**
Field: Physics and Mathematics

AWARDS AND HONORS:

- 2017 Winner of the best paper presented, South Central American Society of Biomechanics, Plano, Texas
- 2015-2017 Graduate Student Travelling Fund Award, Texas A&M Department of Mechanical Engineering.
- 2015-2017 Texas Public Education Grant for International Students.
- 2015-Present Member of American Society of Biomechanics.
- 2008 Offered admission for a Dual-Degree Undergraduate Programs at *Amirkabir University of Technology* as an exceptionally talented student (Four year Fellowship and exempted from entrance exam), Iran.
- 2008 Ranked **35th** in the **Nation**, amongst more than 400,000 participants in the *Nationwide University Entrance Exam* (Mathematics-Physics major) for BS degree, Iran.

ACADEMIC PROJECTS AND RESEARCH EXPERIENCE:

- 2016-Present** “Slip Severity and Slipping Muscle Synergies”, Research supervised by Prof. Hur.
- 2014-2105** “Normal Walking and Slipping Muscle Synergies”, Research supervised by Prof. Hur.
- Spring 2015** “Kneed Dynamic Walker”, Research and simulation supervised by Prof. Hur.
- Fall 2013** “Motion Planning of UAV’s, Air Traffic Control”, Research supervised by Prof. Rathinam.
- 2013** “Forward and Inverse Kinematics and Vibration of a Cartesian Robot in Harsh Environment and Optimization by adding Bead Rope”, B.Sc. Thesis, Supervised by Prof. Behzadipour.
- Fall 2012** Design of an “Artificial Knee via an Optimal Four-Bar Linkage Mechanism by Given Accuracy Points”, Mechanisms Design Course, Supervised by Prof. Zohoor.
- Spring 2012** Full Design of **Scara Robot**-including actuators, Links, Controller, Optimal Trajectory and Obstacle Avoidance-with MATLAB and Simulink, Robotics Course, Supervised by Prof. Behzadipour.

TEACHING EXPERIENCE:

- Summer 2017** Statics and Dynamics of Particles, Teaching Assistant, Texas A&M University.
- Summer 2017** Engineering Laboratory, Lab Instructor, Texas A&M University.
- Spring 2017** Dynamic Systems and Controls, Teaching Assistant, Texas A&M University.
- Fall 2016** Advanced Dynamics and Control Systems, Teaching Assistant, Texas A&M University.
- Fall 2015** Mechanics of Robotic Manipulators, Teaching Assistant, Texas A&M University.
- Fall 2015** Introduction to Robotics, Teaching Assistant, Texas A&M University.
- Spring 2015** Dynamic Systems and Controls, Teaching Assistant, Texas A&M University.
- Fall 2014** Heat Transfer Laboratory, Lab Instructor, Texas A&M University.
- 2012** Applied Electronics, Teaching Assistant/Instructor, Sharif University of Technology.
- Fall 2011** Strength of Materials, Teaching Assistant, Sharif University of Technology.
- Spring 2010** Statics, Grader, Sharif University of Technology.

RECENT PUBLICATIONS:

1. **Nazifi, M.**, Yoon. H.U., Beschorner, K., Hur, P. “Shared and task-specific muscle synergies during normal walking and slipping”, *Frontiers in Human Neuroscience*, Vol. 11, No. 40, 2017.
2. **Nazifi, M.**, Beschorner, K., Hur, P. “Correlation between slip severity and muscle synergies of slipping”, *Frontiers in Human Neuroscience*, (Submitted), 2017.
3. **Nazifi, M.**, Beschorner, K., Cham, R., Hur, P. “Walking Muscle Synergies Influence Propensity of Severe Slipping”, *American Society of Biomechanics*, Aug 2017, Boulder, CO, USA (Accepted).

CONFERENCES:

August 2016 American Society of Biomechanics, Raleigh, NC, USA.

August 2015 American Society of Biomechanics, Columbus, OH, USA.

July 2014 World Congress of Biomechanics, Boston, MA, USA.

SELECTED COURSES:

- Biomechanics of Human Movement
- Motor Neuroscience
- Control System Design
- Design of Nonlinear Control Systems
- Mechanics of Robot Manipulators
- Mechatronics
- Convex Optimization
- Machine Learning
- Multivariate Statistical Analysis

LANGUAGES:

English (Fluent)

Persian (Fluent)

Turkic (Fluent)

Arabic (Fair)

COMPUTER LITERACY:

	MATLAB/Simulink
	OpenSim
	R
Technical	Mathematica
software:	Auto CAD
	Solid Works
	C/C++

Documentation: Microsoft Office

EXTRACURRICULAR ACTIVITIES:

Vice President of Persian Student Association (PSA), Texas A&M University

Vice President of Student Council, Sharif University of Technology

Member of Sharif University of Technology's Swimming Team