Dr. Wafa Znegui

Assistant professor

Personal Data:

Nationality | Tunisian
Date of Hire | 12/01/2023
Date Rank Obtained | 2021
Department | BME
Email | wznegui@kfu.edu.sa
Office No | 59-3072
Office Phone No | 0534062273

Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Electrical engineering	Robotics, Computing and Complex Systems	National Engineering School of Tunis, Tunisia	Tunisia	2021
Masters (M.Sc.)	Electrical Engineering	Mechatronics	National Engineering School of Carthage, Tunisia	Tunisia	2016
Bachelor (B.Sc.)					

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Analysis and control of the dynamic walking of planar biped robots via Poincaré maps
Master	Build on an intelligent tool for automotive “BOITA”.

Experiences:

Title of Job	Address of Work	Country	Date	
Assistant professor	Higher Institute of Information and Communication Technologies, ISTIC, Tunisia.	Tunisia	From	2021
			To	2022
Assistant	Higher Institute of Information and Communication Technologies, ISTIC, Tunisia.	Tunisia	From	2019
			To	2021
Research and Development Engineer	STEMA Training and Developing Center	UAE	From	2017
			To	2018
Electrical Engineer	TELNET Holding	Tunisia	From	2016
			to	2017

Research Interests:

1. Passive walking robot
2. Biped robot
3. Chaos and bifurcation

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	**W. Znegui**, H. Gritli and S. Belghith	A new Poincaré map for investigating the complex walking behavior of the compass-gait biped robot	Applied Mathematical Modelling	A new Poincaré map for investigating the complex walking behavior of the compass-gait biped robot | Request PDF (researchgate.net)
2	**W. Znegui**, H. Gritli and S. Belghith	Stabilization of the passive walking dynamics of the compass-gait biped robot by developing the analytical expression of the controlled Poincaré map	Nonlinear Dynamics	Stabilization of the passive walking dynamics of the compass-gait biped robot by developing the analytical expression of the controlled Poincaré map | Request PDF (researchgate.net)
3	**W. Znegui**, H. Gritli and S. Belghith	Erratum to: Design of an explicit expression of the Poincaré map for the passive dynamic walking of the compass-gait biped model	Chaos, Solitons and Fractals	Erratum to: "Design of an explicit expression of the Poincaré map for the passive dynamic walking of the compass-gait biped model" | Request PDF (researchgate.net)
4	**W. Znegui**, H. Gritli and S. Belghith	Design of an explicit expression of the Poincaré map for the passive dynamic walking of the compass-gait biped model	Chaos, Solitons and Fractals	Design of an explicit expression of the Poincaré map for the passive dynamic walking of the compass-gait biped model | Request PDF (researchgate.net)
5	**W. Znegui**, H. Gritli and S. Belghith	Analysis and Control of the Dynamic Walking of the Compass Biped Walker Using Poincaré Maps: Comparison Between Two Design Approaches	Second IEEE International Conference on Signal, Control and Communication 2021 (IEEE SCC'2021)	Analysis and Control of the Dynamic Walking of the Compass Biped Walker Using Poincaré Maps: Comparison Between Two Design Approaches | Request PDF (researchgate.net)

6	**W. Znegui**, H. Gritli and S. Belghith	Control of the Compass-Gait Walker Using an Enhanced Poincaré Map and via LMI-Based Optimization	18th IEEE International Multi-Conference on Systems, Signals \& Devices 2021 (IEEE SSD'2021)	(PDF) Control of the Compass-Gait Walker Using an Enhanced Poincaré Map and via LMI-Based Optimization (researchgate.net)
7	**W. Znegui**, H. Gritli and S. Belghith	Walking Stabilization of the Passive Bipedal Compass robot using a Second Explicit Expression of the Controlled Poincaré Map	20th International Conference on Sciences and Techniques of Automatic Control and Computer Engineering (STA'2020)	(PDF) Walking Stabilization of the Passive Bipedal Compass robot using a Second Explicit Expression of the Controlled Poincaré Map (researchgate.net)
8	**W. Znegui**, H. Gritli and S. Belghith	Control of the Passive-Dynamic Locomotion of the Compass-Gait Biped Robot	International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2020)	(PDF) Control of the Passive-Dynamic Locomotion of the Compass-Gait Biped Robot (researchgate.net)
9	**W. Znegui**, H. Gritli and S. Belghith	Stabilization of the Passive Biped Dynamic Locomotion Using the Controlled Poincaré Map	17th IEEE International Multi- Conference on Systems, Signals \& Devices 2020 (IEEE SSD'2020)	(PDF) Stabilization of the Passive Biped Dynamic Locomotion Using the Controlled Poincaré Map (researchgate.net)
10	**W. Znegui**, H. Gritli and S. Belghith	An Enhanced Poincaré Map Expression for the Passive Dynamic Walking of the Compass-Gait Biped Robot	17th IEEE International Multi-Conference on Systems, Signals \& Devices 2020 (IEEE SSD'2020)	(PDF) An Enhanced Poincaré Map Expression for the Passive Dynamic Walking of the Compass-Gait Biped Robot (researchgate.net)
11	**W. Znegui**, H. Gritli and S. Belghith	An Explicit Analytical Expression of the Poincaré Map for Analyzing Passive Dynamic Walking of the Compass-Gait Biped Model	International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2019)	(PDF) An Explicit Analytical Expression of the Poincaré Map for Analyzing Passive Dynamic Walking of the Compass-Gait Biped Model (researchgate.net)

Language Proficiency:

1. Arabic
2. English
3. French