Saeid Samadi

Ph.D. candidate in Robotics
CNRS-UM, LIRMM

- March 29, 1995
- Rue St. Priest, Montpellier, France
- Office: +33467418585
- https://saeidsamadi.yolasite.com
- saeid.samadi@lirmm.fr
- Iranian

Social Network ———

- Linkedin
- Github Project Page

Languages ———

Persian	● ● ● ● ●	
Azeri	● ● ● ● ●	
Turkish	● ● ● ● ○	
English	● ● ● ● ○	
Arabic	● ● ● ○ ○	
German	● ● ○ ○ ○	
French	● ● ○ ○ ○	

Research interests ·

- Humanoid Robots
- Motion and Pattern Generation
- Control(linear and non-linear)
- Automated Vehicles
- Artificial Intelligence
- Mechanical Design

Education

currently	**Doctor of Philosophy**	University of Montpellier

with thesis title of *"Exploration of contact modes for motion generation and control of multi-body systems"* under supervision of Prof. Abderrahmane Kheddar; Co-director, Dr. Stéphane Caron

2016 – 2018	**Master of Science**	University of Tehran

with thesis title of *"Designing an Online Walking Algorithm of Humanoid Robot on Rough Surfaces with Different Heights"* under supervision of Prof. Aghil Yousefi-Koma and Mohammadreza Zakerzadeh

2012 – 2016	**Undergraduate study**	University of Tabriz

with project topic of *"Free-convection analysis of an elliptic cylinder"* under supervision of Prof. Esmaeil Razavi

Working Experience

currently	**Researcher Ph.D. student**	LIRMM

Member of *Interactive Digital Human group (IDH)* in CNRS-University of Montpellier; Laboratory of Informatics, Robotics and Microelectronics of Montpellier (LIRMM)

2017 – 2018	**Teaching assistant**	University of Tehran

Smart Structure and *Fuzzy Control* courses for graduate students

2016 – 2018	**Research assistant**	CAST

Dynamic and Control member of *Center of Advanced Systems and Technologies (CAST)*, University of Tehran
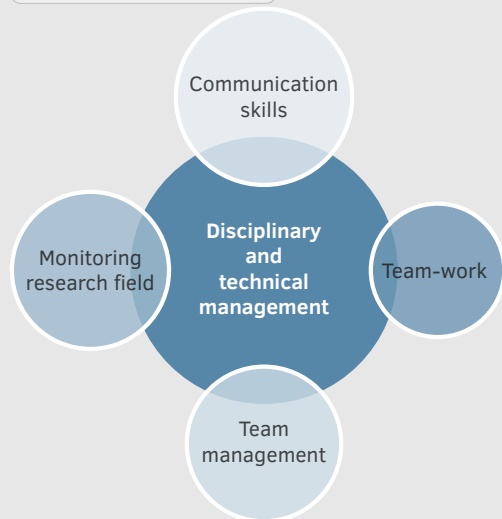
Selected projects

2019	**Motion generation of Humanoid robot**	LIRMM

I developed a novel methodology for humanoid robots to keep the balance in multi-contact and sliding scenarios. Videos of my experiments on *HRP-4* humanoid robot is available in YouTube.
Used Softwares: C++, Python, Pymanoid, Choreonoid

2018	**Walking pattern generation**	University of Tehran

I used Model Predictive Control (MPC) for generating a walking pattern on uneven terrains for humanoid robots; including some experiments on SURENA-MINI.
Used Softwares: Matlab, C

2017 – 2018	**SURENA IV humanoid robot**	CAST

SURENA IV is the last generation of SURENA humanoid robots which will be unveiled in December 2019. I was member of Dynamic and Control team of this project and a volunteer member of design and fabrication team for three monthes. I designed the upper body (chest) and neck mechanism of SURENA IV.
Used Softwares: Matlab, Python, SolidWorks

2017	**Artificial intelligence**	University of Tehran

I used *Extended Classifier Systems (XCS)* to learn and play "Dots and Boxes" game with human or pre-learned systems
Used Softwares: Matlab

2016 – 2017	**Design and Fabrication**	CAST

I designed and fabricated two medium-sized and flapping-wing bird-robots in 7 monthes. They were radio control and auto-pilot versions which ended with successful experiments.
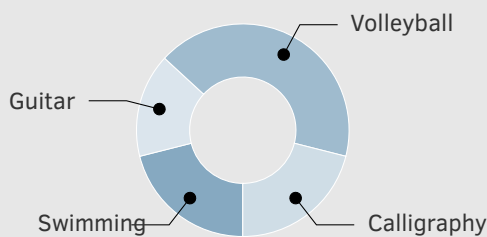***Used Soft/hardwares:*** SolidWorks, Paparazzi, Matlab, CNC-machine

Saeid Samadi

Ph.D. candidate in Robotics
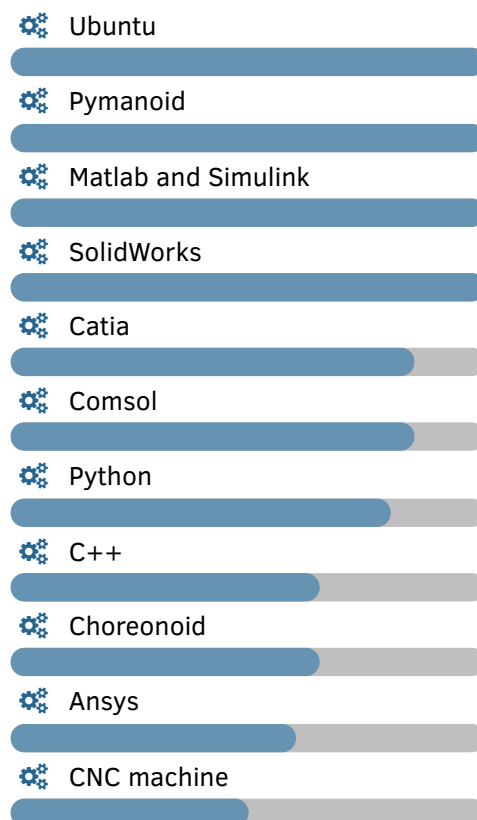CNRS-UM, LIRMM

Other

Non-academic skills

- Communication skills
- Monitoring research field
- Disciplinary and technical management
- Team-work
- Team management

Hobbies

- Volleyball
- Guitar
- Swimming
- Calligraphy

Publications

2020	**Balance of Humanoid robot in Multi-contact and Sliding Scenarios**
	Saeid Samadi, Stéphane Caron, Arnaud Tanguy, and Abderrahmane Kheddar
	ICRA2020
2017	**Control an SMA-actuated rotary actuator by fractional order PID controller**
	Saeid Samadi, Aghil Yousefi-Koma, Mohammadreza Zakerzadeh, Farshad Nozad-Heravi
	ICROM 2017
2016	**FOPID control of a solar furnace (in persian)**
	Saeid Samadi, Farshad Nozad-Heravi and Mohammadreza Haeri-Yazdi
	ISME 2016

Honors and Awards

2018	**Ranked first among all applicants for Ph.D. position in CNRS-UM**
2016	**M.Sc. Program Fellowship, Awarded by Ministry of Science, Research and Technology, Iran**
2016	**Ranked among top 10 percent Undergraduate students and got Fellowship to pursue M.Sc. Program at University of Tabriz**
2012	**Ranked as top 0.7 percent among 260,055 participants in Iran's university entrance exam and B.Sc. Program Fellowship**
2011	**Honored and Ranked as the 1st student in high school for whole three years of education**
2007	**Educational Acceleration of the second grade of Middle School**

Skills

- Ubuntu
- Pymanoid
- Matlab and Simulink
- SolidWorks
- Catia
- Comsol
- Python
- C++
- Choreonoid
- Ansys
- CNC machine