

Curriculum vitæ

Work Address

Work Phone

Email

Homepage

LinkedIn

Skype

Dr.-Ing. Pouya Mohammadi

Mühlenpfordtstraße 23,
38106 Braunschweig

+49 531 391 7437

p[dot]mohammadi[at]tu[dash]bs[dot]de ■ contact[at]pouya[dash]moh[dot]com

pouya-moh.com ■ rob.cs.tu-bs.de/pmo

/in/pouya-moh

mohammadi [dot] pouya

Professional Bio

Current position

Postdoctoral researcher in machine learning and robotics at the Institute for Robotics and Process Control, TU-Braunschweig

Professional Interests

Machine learning, AI & physical-AI ■ Robot control architecture design, motion planning & programming ■ Model based design and domain specific languages

Work Experiences

Oct 2019 – now

EU Project CMCI

Technical integrated project of RobMoSys

Objective

Creating composable domain-specific (meta-) models, synthesizing languages for optimization problems

Roles

- Domain expert and designer
- Lead the project on the quadratic optimization front

Info

github.com/rosym-project ■ robmosys.eu

2015 – 2019

EU Project CogIMon

Large scale project with 8 consortium members from 4 countries

Objective

Step-change toward the systemic integration of robust, dependable interaction capabilities for teams of humans and robots

Roles

- Actively involved in the coordination of the project
- Leading the work-pages of several demonstrations and experiments
- Member of the lead developers team responsible for full software stack

Info

cogimon.eu ■ cogimon.github.io

2008 – 2010

Research and Development

R&D staff at Eastcool Co., major producer of electric appliances, Iran

Area of work

- Automation of industrial processes and prototyping for the production
- Certified PLC programmer
- Leading interns software developers

Education

PhD¹

2015-2019

Context Aware Body Regulation of Redundant Robots

Technische Universität Braunschweig, Germany

Introducing new paradigm in control architecture of robots that improves

- Composability
- Reusability
- Scalability

¹Dissertation to be published in July 2020

Master of Science
2010-2013

Artificial Intelligence and Robotics

Sapienza University of Rome, Italy
One of the leading robotics and AI labs in the world
Average score of 110/110

Bachelor of Science

Computer Science

Shahid Bahonar university of Kerman, Iran
And associate degree in *computer software*
Ranked 45th among +10,000 applicants in the university entrance exam

Technical Proficiency

Robotics

- Designing software architecture for robot control
- Experienced in OROCOS/ROS/RSB and their related assets
- Real- and non real-time control orchestration
- Worked with several industrial and research robotic platforms

Machine Learning

- Theoretical and practical knowledge in Matlab, familiar with PyTorch
- Familiar with data visualization tools such as chart.js
- Working on a new domain specific language for machine learning tasks

Programming

- Years of experience in programming C++/C and Java
- Several scripting languages including Python, Matlab and Bash
- Continues integration and continues delivery, Version control, Dockers

Miscellaneous

- Meta programming systems and model based design workbenches
- Numerical optimization and solvers
- Architecture design for complex multi-paradigm systems
- Familiar with micro controllers, PLCs and sensor

Leadership/Mentoring

Leadership

Apart from the EU projects coordination, I have (team) leadership experiences:
Leading teams of post graduates conducting larges scale robotic experiments
Mentoring multiple master's thesis in machine learning at TU-Braunschweig

Teaching

Tutoring Robotics lectures in TU-Braunschweig and Uni-Bielefeld
Teaching AI programming in time constrained applications

Language Proficiency

English

Fluent in all English skills

Italian

Fluent in comprehension, listening and speaking of Italian language

German

Hold a B1 certificate from Uni-Bielefeld, actively learning

Persian

Mother tongue

References²

Prof. Dr. Jochen Steil

Chair of robotics at TU-Braunschweig
j[dot]steil[at]tu[dash]bs[dot]de

Dr.-Ing. Milad Malekzadeh

Machine learning specialist at Han's Robot
milad[dot]malekzadeh[at]hansrobot[dot]de

²Further recommendation from former academic and industry affiliates can be obtained if needed