Mojtaba Porghoveh

Personal Information

- Birth: May 2, 1988

- Google Shcolar Page: https://scholar.google.com/citations?user=hijmxW4AAAAJ&hl=en

Work Experience

Period	**Decemner 2021 — Present**	
Employer	**Industry Relation Office of Shahid Chamran University**	Ahvaz, Iran
Job Title	**Researcher**	
Languages	**Python and Matlab**	

I have been working on optimal array sensors to estimate acoustic pressure at any arbitrary point inside an enclosure

Period	**July 2020 — Present (Part Time)**	
Employer	**Taha Ghaleb Tous Corporation**	Mashhad, Iran
Job Title	**Development Manager**	

Fixtures and heat exchangers are built in this company, I work on the optimization of the production chain.

Period	**September 2020 — February 2021**	
Employer	**Shahid Chamran University**	Ahvaz, Iran
Job Title	**Lecturer**	

I tought meta-heuristic optimization algorithm with coding in Matlab and Python.

Period	**May 2019 — August 2020 (Part Time)**	
Employer	**National Elite Foundation**	Ahvaz, Iran
Job Title	**Researcher**	

I designed a tank with optimum water flow for a bio-filter.

Education

Period	**2016 — 2021**	
Degree	**Ph.D. in Mechanical Engineering**	
Rank	**First Class Honours**	
University	**Shahid Chamran Universiy of Ahvaz**	Ahvaz, Iran

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PERIOD	**2011 — 2014**
DEGREE	**MSc. in Mechanical Engineering**
RANK	**First Class Honours**
UNIVERSITY	**IAUM** Mashhad, Iran

PERIOD	**2006 — 2011**
DEGREE	**BS. in Mechanical Engineering**
UNIVERSITY	**IAUM** Mashhad, Iran

RESEARCH INTERESTS

Optimization, Vibration, Acoustics, Active Control Systems, Robotics, Artificial Intelligence

SKILLS

Computer Languages	Python, Julia, Matlab
Languages	Persian(Mother tongue), English(Proficient)
Computer Skills	COMSOL, Autocad, Maple, Microsoft Office, Latex

PUBLICATIONS

- Porghoveh, M., Shirazi, K. H., & Yildizdag, M. E. (2023). Developing an optimum sensor array for acoustic pressure estimation inside an enclosure using evolutionary-based optimization algorithms. Applied Acoustics, (Under Review).

- Porghoveh, M., Shirazi, K. H., & Yildizdag, M. E. (2022). Engine noise cancellation with optimum array of speakers inside vehicle enclosures. Journal of Vibration and Control, 10775463221122126.

- Porghoveh, M., Heidari Shirazi, K., Messia, A., & Yildizdag, M. E. (2022). A PSO-based computational framework to design active noise cancelation systems for smart vehicle enclosures. Mathematics and Mechanics of Solids, 27(10), 2073-2084.

- Porghoveh, M., Shirazi, K. H., & Yildizdag, M. E. (2021). A fast analytical framework to identify acoustic field properties of rectangular enclosures with a vibrating plate. Applied Acoustics, 182, 108185.

- Jorfi,S., Ghahari,S., Ravanbakhsh,M., Porghoveh,M. Spirogyra sp. isolate gh-2 small subunit ribosomal RNA gene, partial sequence. Environmental Health Engineeing.

- Jahanpour, J., Porghoveh, M., & Ilbeigi, S. (2016). Forced vibration analysis of a system equipped with a Nonlinear Displacement-Dependent (NDD) damper. Scientia Iranica. Transaction B, Mechanical Engineering, 23(2), 633.

- Jahanpour, J., Porghoveh, M. & Ilbeigi, S. (2016). Resonant analysis of systems equipped with nonlinear displacement-dependent (NDD) dampers. Journal of Nonlinear Dynamics, Volume 1 (pp. 67-82). Springer, Cham.

- Jahanpour, J., Porghoveh, M. & Motallebi, M. (2016). A novel trajectory planning scheme for parallel machining robots enhanced with NURBS curves. Journal of Intelligent & Robotic Systems, 82(2), 257-275

- Jalalvand, M., Porghoveh, M, & Pouyesh K. Optimum position control of a servopneumatic system using GA and pulse width modulation with sliding mode control. Journal of Advanced Modeling and Optimization.

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Patents

IR 95162:	**Controllable Static/Dynamic Humanoid Robot for Warning Announcement Capable of Flagger and Tracking devic**

GenBank: MW063644.1:	**Bio-Filter: Spirogyra sp. isolate gh-2 small subunit ribosomal RNA gene, partial sequence** `https://www.ncbi.nlm.nih.gov/nuccore/MW063644`

Internships

Research Fellow	**International Research Center on Mathematics and Mechanics of Complex Systems**
Period	**Aug. 2019 — Feb. 2020**
University	**L'Aquila University** Roma, Italy

Research Fellow	**Ship Vibrations and Acoustic Laboratory**
Period	**Sep. 2020 — Aug. 2021**
University	**Istanbul Technical University** Istanbul, Turkey

Research Projects

- Jerk and acceleration minimization in the joint of 4U-PS robots by trajectory planning.

- Maximization of the machinary speed by optimizing the trajectory of a machinary path.

- Minimizing the sensor numbers in an array of speakers and microphones for an active noise control system.

- Optimum contol system design for a PSS turbine used in powerstations.

- Active engine noise cancellation system desig in vehicles.

- Nonlinear damper design for reducing vibrations in a mass-spring-damper system with general applications.

References

- Kourosh Heidari Shirazi, Professor of Mechanical Engineering. Chamran University of Ahvaz, Ira. email: k.shirazi@scu.ac.ir

- Afshin Ghanbarzadeh, Professor of Mechanical Engineering Chamran University of Ahvaz, Iran. email: ghanbarzadeh.a@scu.ac.ir

- Javad Jahanpour Professor of Mechanical Engineering Azad University of Mashhad, Iran. email: jahanpourfr@mshdiau.ac.ir

- Erden Yirdizdag Associate Professor of Mechanical Engineering Technical University of Istanbul, Turkey. email: erdenyildizdag@gmail.com