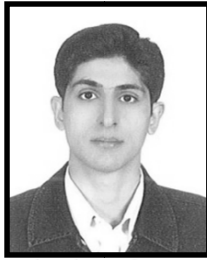


Morteza Kalantari Dezfooli

Crriculum Vitae



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Adress: No. 2, Bahar alley, Ferdos Blvd., Tehran, Iran.

Date and Place of Birth: Shiraz, Iran, 03/28/1981

Gender: Male

Nationality: Persian (Iranian)

PURPOSE:

Application For Ph.D. in Mechanical Engineering

RESEARCH INTERESTS

- Fluid Mechanics:** Experimental and Computational Fluid Dynamics
Micro scale Fluid dynamics (Specially MEMS/NEMS)
Coupled Flow-acoustic phenomena
Two Phase Flow
Fluid-Structure Interactions
- Automotive:** Internal Combustion Engine
Combustion Modeling
Bi-fuel and Dual-fuel Engines
Unsteady pulsative flow modeling thorough engine manifolds
Vehicle HVAC
- Heat Transfer:** Numerical and Experimental Heat Transfer
Reacting Flows

EDUCATION

- M.Sc.:** Mechanical Engineering (Energy Conversion), Dec. 2005
Sharif University of Technology, Tehran, Iran
<http://www.sharif.ir/en/>
Total GPA: 16.97/20 (rank 4th)
Thesis: **Numerical simulation and study of flow and acoustics in vehicle silencers.** (Under supervision of Prof. B. Farhanieh and Prof. S. KazemZadeh)
- B.Sc.:** Mechanical Engineering, Sept. 2003
Shiraz University (formerly Pahlavi University), Shiraz, Iran
<http://www.shirazu.ac.ir/en/>
Total GPA: 15.33/20 (rank 3rd)
Thesis: **Developing generalized software for optimization of water transmission pipelines and preparing technical drawings.** (Under supervision of Prof. M. E. Goshtasbi Raad)

ENGLISH PROFICIENCY

- **TOEFL, Total Score 94**
Reading 28, Listening 23, Speaking 19, Writing 24
- **GRE, Total Score 1200**
Verbal 400, Quantitative 800, Writing 3.0

RESEARCHS AND EXPERIENCES

- Head of mechanical engineering student's scientific association, Shiraz University, 2001-2002
- Editor-in-chief of mechanical engineering student's scientific association magazine, Shiraz University, 2002-2003
- **Some Accomplished Academic projects:**
 1. Determining exhaust gases composition of oxidation of an arbitrary hydrocarbon fuel considering 11 products.
 2. Numerical simulation and study of fluid flow using Fluent® software as course projects:
 - Supersonic turbulent flow around two dimensional airfoil
 - Heat transfer phenomena through heat pipes
 - Normal Shock formation in a supersonic diffuser
 3. Numerical simulation of steady flow of cooling air around turbine disks of a jet engine.
 4. Numerical simulation and study of unsteady flow through inlet manifold of internal combustion engine using nonlinear one dimensional wave action method.
 5. Simulation and study of thermodynamic cycle of a 4-strokes spark ignition internal combustion engine, considering 7 exhaust gas composition.
 6. Three dimensional modeling and geometrical optimization of air-gas mixing through bi-fuel internal combustion engine gas mixer using Fluent® software.

■ Work Experiences

1. Design Assistant & Trainee, Aban Air Cooler Co., designing shell-and-tube heat exchangers and air coolers for oil and petrochemical industries (2002 for a 4 months period)
2. Designer in chief, PPAS Consultant Engineering Co., design of water transfer lines and distribution networks, 2004-2005
3. Working at SAIPA Automotive Industries Research and Innovation Centre (AIRIC) as Design Engineer, 2003-2006
4. Technical Supervisor, SAS Consultant Engineering Co., designing water distribution networks, 2007 up to now
5. Designer and Inspector of HVAC utilities, Constructions Engineers Organization, 2008 up to now
6. Quality Expert, SAIPA Automotive Corporation, April 2006 up to now

PUBLICATIONS

- V. Isfahanian, M. Kalantari, D. Kamandlooie, "One-dimensional Numerical simulation of turbocharger using nonlinear wave action method", 13th International Annual Conference of Mechanical Engineering, Iran, 2005 (In Farsi)
- B. Farhanieh, M. Kalantari, D. Kamandlooie, "Numerical simulation and optimization of vehicle silencer using one-dimensional nonlinear wave action method", 5th conference on internal combustion engine, Tehran, Iran, 2007. (Recognized as distinguished article and published in the Journal of Engine Research, Vol. 13, 2008)
- M. Kalantari, D. Kamandlooie, A. Esmacili Sani, "Three-Dimensional Numerical simulation and optimization of gas mixer for a bi-fuel internal combustion engine", 5th conference on internal combustion engine, Tehran, Iran, 2007. (In Farsi)
- A. Parvizi, M. Kalantari, A. A. Khatibi, "Numerical study on mechanical properties of single-walled carbon nanotubes", 2nd International Congress on Nanoscience and Nanotechnology, Iran, 2008

MEMBERSHIPS

- Iranian Society of Mechanical Engineers (ISME).
- Iranian Construction Engineers Organization
- Iranian Scientific Society of Engine Research

COMPUTER AND PROGRAMMING SKILLS

- Programming: MatLab, FORTRAN, Visual BASIC, Autolisp
- Drawing: AutoCAD, SolidWorks, Catia, Working Model
- Engineering Softwares: Fluent and Gambit, ANSYS, COSMOS

SOME ATTENDED TRAINING COURSES

- Communication Skills, Sharif University of Technology, Tehran, Iran.
- Concepts in Quality Engineering, SAIPA Co., Tehran, Iran.
- Design of Experiments, TÜV Academy, Tehran Iran.
- Creativity and Innovation and TRIZ, SAIPA Co., Tehran, Iran.
- Value Engineering, SGS Co., Tehran, Iran.
- Geometric Dimension and Tolerancing, SAIPA Co., Tehran, Iran.
- Welding and Nondestructive Tests, SAIPA Co., Tehran, Iran.
- Failure Mode and Effect Analysis, SAIPA Co., Tehran, Iran

HONORS AND AWARDS

- Graduated with a B.Sc. as the 3rd place among 40, 2003, Shiraz University, Shiraz, Iran.
- Distinguished Degree in the nationwide universities entrance exam of Iran for M.Sc. in Mechanical Engineering, (rank 65 among all applicants, approximately 13,000 applicants), 2003.
- Receiving Research Scholarship for graduate study from Automotive Industries Research and Innovation Centre (AIRIC), 2004-2006
- Graduated with a M.Sc. as the 3th place, 2005, Sharif University of Tech., Tehran, Iran.

REFERENCES

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- **Alireza Roshan Milani,**
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