



PERSONAL INFORMATION

Seyedparham Malekmohammad

 **Fuel, Combustion and Emission Research Center**, Mechanical Engineering Department, Sharif University of Technology - Azadi Avenue - Tehran - Iran

 (+98) 910 233 1893

 sparham.malek@gmail.com

 www.linkedin.com/in/Parham-Malekmohammad

Sex Male | Date of birth 10/04/1993 | Nationality Iranian

RESEARCH INTERESTS

- Combustion and alternative fuels
- Internal Combustion Engines
- Automotive Engineering
- Automotive Powertrain Control
- Hybrid & Electric Powertrains
- Motorsport Engineering
- Emission Measuring & Controlling Systems for IC Engines

EDUCATION AND TRAINING

09/2011–08/2016 **B.Sc. in Mechanical Engineering**
Sharif University of Technology, Tehran (Iran)

2007–2011 **Mathematics and Physics Diploma (First Rank)**
Soroush High School, Tehran (Iran)

PUBLICATIONS

- Vahid Hosseini, Seyedparham Malekmohammad, Amin Imani, “**Numerical Investigation of Flame Laminar Speed of Iso-Octane, Ethanol Blend in Spark Ignition Engine**” (in preparation)
- Vahid Hosseini, Seyedparham Malekmohammad, Navid Balazadeh, “**An experimental analysis of performance and emission of an LDV with ethanol and gasoline blend (E85)**” (in preparation)

PROJECTS

- Feasibility of converting a petrol engine (Euro4) to a fuel flex engine which will be able to use gasoline and E85, FCE Research Center, Sharif University of Technology, 2016-Present
- Research on sources of NVH in Internal Combustion Engines, Sharif University of Technology, 2016-2018
- My bachelor Project Under the supervision of [Prof. Mahmoud Saadat Foumani](#) : “**Study and Implementation of Tuning Procedures on a typical spark ignition Engine**”, 2016
- Simulation of Internal Combustion Engine Performance in MATLAB Software , 2015
- Tuning Internal Combustion Engines for Racing Cars, including Software Tuning, Calibration, Programming , 2015
- Design Electromechanical Parking Brake (EPB) System for Passenger Cars, 2014
- Design Cruise Control System for Mechanical(Wire) Throttle Internal Combustion Engines , 2013

WORK EXPERIENCE

- 12/2016–Present **Research Assistant**
Fuel, Combustion and Emission Research Center, Sharif University of Technology
Under Supervision of Prof. Vahid Hosseini
- One-Dimensional Simulation of S81 Gasoline Engine (Saipa's Engine) in GT-Power Software
 - Calibration of Predictive Combustion Model for S81 Gasoline Engine (Saipa's Engine)
 - Research on the effects of ethanol Gasoline Engine Operation, and the required changes for achieving the best performance in Flex Fuel Vehicles (FFV)
- 12/2016–03/2018 **Research Assistant**
Mechanical Engineering Department, Sharif University of Technology
Under Supervision of Prof. Mahmoud Saadat Foumani
- One-Dimensional Simulation of Powertrain System for TIBA Vehicle (Saipa's Product)
 - One-Dimensional Simulation of Timing & Valve train System for S81 Gasoline Engine (Saipa's Engine)
 - Research on sources of NVH in Internal Combustion Engines
- 03/2016–11/2016 **Technical Support of IC Engines**
Aala Niroo Company
www.aalaniroo.com
- Instructor of the Course :
"Operation & Troubleshooting of IC Engines in Gas & Diesel Generators"
- 08/2015–09/2015 **Internship**
IKCO (Iran Khodro Company)
www.ikco.ir
- Visited different sites and workshops (Assembly line of different vehicles and engines)
 - Visited "Peugeot TU5" Engine assembly line
 - 240 working hours
- 09/2011–05/2015 **Physics instructor**
Soroush High School, Tehran (Iran)

PERSONAL SKILLS

Mother tongue(s) Persian

Foreign language(s)

TOEFL (iBT)	GRE
Overall Score: 87	Planned to take on 16 th December

Communication skills ▪ Good communication skills gained through my experience as a teacher in high school

Organizational / managerial skills ▪ Editor in Chief, Magazine of Applied Mechanics "*Naame Mechanic Sharif*" 2014
▪ Executive Secretary, "*8th Sharif Mechanic Industrial Festival*" 2013

Job-related skills ▪ having some experience with ECU Programming and map calibration for Racing cars
▪ Sufficient proficiency in ICE software: GT-Power, AVL
▪ strong background about the operation of SI Engines and Powertrain Systems

Computer skills ▪ Programming: C, C++, MATLAB
▪ Mechanical Engineering Software: AutoCAD, Solidworks, CATIA, GT-Suite, Carsim

Other skills ▪ Racing Driving License 'C' in Formula Track, Formula Car Racing School, Azadi Karting Complex, Tehran, Iran
▪ Physical Readiness Coaching, Ministry of Youth Affairs and Sports, Tehran, Iran

ADDITIONAL INFORMATION

Advanced Courses ▪ Advanced Internal Combustion Engines, Sharif University of Technology, Tehran, Iran
▪ Vehicle Chassis Analysis, Sharif University
▪ Mechatronic Systems in Automobile, Center of Workshops in Sharif University
▪ Practical Electronic, Sharif University
▪ Rotax Racing Kart Repair and Service, Formula Car Racing School, Azadi Karting Complex, Tehran, Iran

Honors and Awards ▪ Ranked 16 among more than 400,000 participants in the nationwide university entrance examination for undergraduate program 2011

Memberships ▪ Member of "Iranian Society of Mechanical Engineers" 2012
▪ Member of "American Society of Mechanical Engineers" 2012
▪ Member of "Sharif University Environment Fans" Group 2011