

Name: Mojtaba Pakbaz-Miab

Date of birth: 1366 (1988)

Phone Number: +989151808812

Email: Pakbaz.mojtaba@gmail.com



Educational Background

Degree	Field of Study	Test Ranking	Entrance Date	Graduation date	University Name	City of Schooling
High School	Auto Mechanic	No test	2002	2004	Kharazmi Conservatory	Qouchan
Associate Degree	Auto Mechanic	elite condition	2004	2006	Saamen-ol-Hojaj vocational university	Mashhad
BSc	Automotive Technology Engineering	elite condition	2009	2012	Shahid Rajaei University	Tehran
MSc	Automotive Propulsion	elite condition	2012	2014	Shahid Rajaei University	Tehran

Title of Associate Degree Dissertation	Fuel controller and testing it on a 16-valve gasoline engine (Innovation)
Supervisor	Engineer Mohammad-Zadeh
Title of BS Dissertation	Designing and Manufacturing Diesel High Tension Injector Pump with a low level of Power Consumption (Invention)
Supervisor	Dr. Sha'ban Ali-Yari
Title of MS Dissertation	Two-Stroke Rotary Diesel Combustion Engine (Invention)
Supervisor	Dr. Ali-Yari, Dr. Mir-Mohammadi
Advisor	Engineer Seyyed Mostafa Mir-Salim

Submitted Articles

- Present an article in the First Conference of Iranian Internal Combustion Engines – Semnan university, by the title of *Injecting High Tension Diesel Pumping using Engine Compression*

Scientific and Research Accomplishments

- *First place of inventions in the Fourteenth festival of “Javan-e-Kharazmi”, National phase, 2012*
- *Top Researcher of Shahid Rajaei university of Tehran, BS, 2012*
- *Top Researcher of Shahid Rajaei university of Tehran, MS, 2013*
- *Silver Medal for Poland International Invention competition, 2009*
- *Gold Medal for China International Invention competition, 2008*
- *Earn approval from the Russian Aerospace Institution in Russia Invention competition, 2007*
- *Bronze Medal for Malaysia International Invention competition. 2007*
- *Third grade of inventions in the seventh festival of “Javan-e-Kharazmi”, National Stage, 2005*
- *Top student of Kharazmi conservatory in Qouchan, 2005*
- *Best project of Khorasan province in Kharazmi festival, 2009*
- *First grade in entrepreneurial competitions among manufacturing cooperative companies, 2007*
- *Corporator and Supervisor of first-grade team of Tehran in the thirteenth National Olympiad of proficiency, 2012*
- *Participation in Tehran International Fair; Research and innovation festival, 2009*
- *Getting Invitation to project presenting in Mashhad International Fair by provincial Agriculture Jihad, Iran inventor club and inventors community, 2008*
- *Getting approval from Iran-Khodro Motor Researching center (IPCO), Sana'ti Sharif University, Amir-Kabir University, and Enqlab Eslami Technical University of Tehran, in line with designing and manufacturing Diesel High-Tension Injector pump, 2011*
- *Getting recommendation from Mechanics research center, Association of industrial and scientific researches, 2012*
- *Contracting research projects with Shahid Rajaei University about inventory project of CVT Gearboxes, 2013*
- *Contracting research projects with Shahid Rajaei University about inventory project of Diesel High-Tension Injector pump with low level of power consumption, 2011*
- *Supervisor of Electrical motorcycle team in Shahid Rajaei University, 2012*

Some of registered inventions

- *The patent of Diesel High-Tension Injector pump with low level of power consumption (CIP)*
- *The patent of Diesel Rotary Internal-Combustion Motor with high level of power and efficiency*
- *The patent of four-stroke motor with four-cylinders into two-cylinders*
- *The patent of automatic mower machine*
- *The patent of full-hydraulic, anti-reversal and gradient-traversal tractor*

- *The patent of anti-friction magnetic ABS system*
- *The patent of hydraulic power transmission system*
- *The patent of magnetic spring and snubber*
- *The patent of security and safety system of the cars and passengers*
- *The patent of energy absorbing system for the impact of spaceship landing and emergency airplane landing, and icebreakers*
- *The patent of Continual Variable power Transmission (CVT) system with a distinct and novel idea*

Performed Inventive Projects

- *High-Tension fueling system of diesel motors with lower level of power consumption in comparison to updated pumps, in Shahid Rajaei University, in partnership with scientific support of Engineer Mostafa Mir-Salim and Industrial and Scientific Researches Institution, and Dr. Savad-Kouhi*
- *Designing and manufacturing CVT gearbox by the help of Shahid Rajaei University (SRTTU) and Dr. Sabouri's advices*
- *Energy absorbing system for the impact of spaceship landing and emergency airplane landing, and icebreakers, and bumper of different automobiles in partnership with Dr. Molaii, and Dr. Navid Anvari-Pour*
- *Medical slipsole with fluid layer*
- *Automatic mower machine*

On-going research and scientific projects (as executive)

- *Frictionless Electromagnetic ABS system, formerly in Amir-Kabir University, and now in Shahid Rajaei University, in partnership with Dr. Hamed Panjeh, Engineer Amir Mo'men-Zadeh, Dr. Amir Khaledian, Dr. Elyas Abdollahi, and by the help of Professor Abedi and Engineer Nehbandaiian*
- *Designing Diesel Two-stroke Rotary Combustion motor by the help of Engineer Elqar Abdollahi, Engineer Peyman Rajabi, Engineer Hamidreza Ya'ghoubi, Engineer Pourya Rahnama, and the scientific support of Dr. Sha'ban Alyari, Dr. Mir-Mohammadi, Engineer Mir-Salim*

Research and scientific projects under study

- *Experimental Reaserch abuot Combined cycle in Diesel & otto*
- *Feasibility of CVT designing and installation wind turbines*

Software Skills

Expert of CATIA Software, environments as:

Generative Shape Design

Part Design

Assembly Design

DMU kinematics

Sketch tracer

Analysis

Lathe Machining

Prismatic Machining

Advanced Machining

Automation Studio software Designing various hydraulic circuits

Familiar to Solidworks software Part environment

ABAQUS software..... Solid Analysis

Familiar to FLUENT software Passing beginner course

Geartrax software

Working Experience

- *Founder and managing director of Koushay ASAK, the youth manufacturing cooperation company from 2006 up to now, and upgrading it to Danesh-Bonyan company, by the title of Sazandegi Andishe-haye Kalan (A.S.A.K Co.)*
- *Manager of mechanics, association of Iran inventors, 2008*
- *Designer and executer in inventive team of electromagnetic breaking system, from 2007 up to now*
- *Designer and executer in inventive team of Diesel High-Tension Injector pump, from 2009 up to now*
- *Cooperation in Tehran University hybrid-bus team, 2011*
- *Cooperation in Khajeh-Nasir-Tousi University bus Simulator team, 2010*
- *Designing and manufacturing hydraulic concrete mixer with gasoline engine for Omran-Sazeh company, 2007*
- *Manufacturing Planetarium device for one of the schools in Mashhad, 2008*
- *Designing and performing Injector Electromechanic Fuel controlling system without using ECU, on V16 TOYOTA engine, in vocational university of Samen-ol-Hojaj in Mashhad, 2009*
- *Maintenance of light and heavy, and diesel and gasoline piston motor combustion*

- *Designing and manufacturing drawing table, with a turning-to-all-directions option, 2005*
- *Manufacturing smart chopper device for pat dishes with an inventive idea of rotary punch, 2011*
- *Membership and supervisor of Tehran top team in 13th Proficiency National Olympiad, national stage, 2012*
- *Supervisor of Electrical motorcycle team in Shahid Rajaei University, 2012*
- *Reverse Engineering and manufacturing chassis and power transmission system of Argo vehicle, 2013*
- *Designing Jig and Fixture*
- *Maintenance of Alternator, Dynamo, and vehicle Starter*

Lateral Capabilities

- *Engine and gearbox experiment potency with Eddy Current dynamometer and hydraulic dynamometer*
- *Designing and manufacturing of Die Cast device in high industrial tonnage*
- *Dominant on metal lathe*
- *Dominant on lathe*
- *Working with milling machine*
- *Dominant on Radial Drill*
- *Brass welding*
- *Welding with Rectifier (electricity)*
- *MIG welding*
- *TIG Aluminum welding*

Membership

Iran Inventors Community

National foundation of elites

Iran national of Inventors Club

Young Researchers Club

Interested in cooperating in fields as

Designing and performing special machineries in road construction, Sea industry, Vehicle industry, Oil industry, and Mining industry

Designing and performing Industrial Automation

Designing and performing Aluminum casting device By Die Casting

Designing, manufacturing, and experimenting piston combustion engines of Jets and Ram jet

Designing and manufacturing various industrial gearboxes

Designing and implementation of Semi-automatic Production Line of Roll forming for various U-Like profiles