

Mohsen Janmaleki

- Education
- **2004, AmirKabir University of Technology (Tehran Polytechnic)**, Department of Biomedical Engineering, Tehran, Iran, Master's in biomedical engineering, major in bioelectric, **Thesis:** *Design and Development of a Electromagnetic field Driver for Hemorheological Viscometer (based on 3 phase Induction, Asynchronous, motor and PWM Inverter)*
 - **2001, Shaheed Beheshti Medical University**, Medicine Faculty, Tehran, Iran, Bachelor's in biomedical engineering, major in bioelectric, **Senior Project:** *Design and Development of a computer based Electromyograph*
- Honor and Award
- **2005**, Best student paper in the 13th Iranian Conference on Electrical Engineering (ICEE)
 - **2001**, Outstanding undergraduate student. Ranked 1st in the class of biomedical engineering, Shaheed Beheshti Medical University
- Patent
- N. Fatouree, A. Pashae, M. Janmaleki
"Design and Development of a Hemorheological Viscometer"
Iran patent No. 7721, Issued October 3, 2006
 - M. Janmaleki, Moghaddam
"Design and Development of an Electronic programmable Thermostat based on Hijri(Jalali) Calendar"
Iran patent No. 42768, Issued September 19, 2007
 - M. Janmaleki,
"Design and Development of an Automobile Electromagnetic Relay's parameters Tester for mass production Line "
Iran patent No. 42898, Issued September 24, 2007
- Publications and Presentation
- 4 sections of Medical Equipment Encyclopedia, (Surgery and Electrosurgery, Anesthesia and Ventilation, Vital Detectors and general Electric Devices. 2008. <http://www.medicalequipment.ir>
 - Mohsen Janmaleki, Farzad Towhidkhah, Nasser Fatouree, *"Modeling the Electromagnetic Generator of the Hemorheological Viscometer as a three phase Inductive motor"*, ICEE2005 (Farsi).

- Mohsen Janmaleki, Farzad Towhidkhah, Nasser Fatouraee, “*Design and development of a control system for Electromagnetic field in Hemorheological Viscometer*”, ICEE2005 (Farsi).
- Mohsen Janmaleki, Farzad Towhidkhah, Nasser Fatouraee, Poster presentation on “*Modeling the Electromagnetic Generator of the Hemorheological Viscometer*”, World Congress on Medical Physics and Biomedical Engineering, Seoul, Korea, 2006.
- Moghaddam, Tafti, Janmaleki, “Design and Implementation of Annual Programmable Thermostat for Office and Home Fuel Conservation, 5th Conference on Fuel Conservation in Buildings”, Iran, 2006

Works and Experience

- **2006-Now**, Faculty Member of shahid Beheshti Medical University, Nanomedicine and Tissue Engineering Research Center
- **2005-2006**, Biomedical Engineering Technical Services Center, a branch for Iranian Academic Center for Education, Cultural and Research, CEO, Tehran, Iran.
- **2001-2007** ArmanCar Co. Tehran, Iran, Electronic designer, Design and mass production of automobile electromechanical parts.
- **1999-2001**, Ministry of Health and Medical Education, Tehran, Iran, Consultant and Medical Equipment Engineer, member of technical commission in Tender Evaluation, Equipment specifications and scheduling, Supervision on Installation, Equipment layout,

Other Related Activities

Design and Development

- **1999**, Two Computer based Physiological Data Acquisition and processing systems (12Bits-100Khz), Shaheed Beheshti Medical University, Physiology Dept., Dr. F. Motamedi and Dr. H. Esteki
- **2000**, A Computer based Physiological Data Acquisition and processing system (12Bits-100Khz), Shaheed Beheshti Medical University, Pharmacology Department,
- **2003**, Automobile Electromagnetic Relays Tester, It is utilized in mass production Line of some kinds of Automobile relays for measuring the exciting and maintaining voltages and check the Functionality. ArmanCar Co.
- **2004**, A Computer based Data Acquisition card (16Bits-100Khz), Developing an Intensive care ventilator project, Pulmonary Diseases Research center, Masih Daneshvari Hospital, Shaheed Beheshti Medical University,
- **2006**, A two-channel Digital Thermometer for monitoring the functionality of the Electronic Thermostats.
- **2006**, controller for water sun warmers, Samin Co.
- **2007**, Data Logger, 2 Channels Digital Hygrometer with 8 Temperature Sensors

- **2001-2007**
 - ArmanCar Laboratory Devices for analyzing and Quality control of some automobile parts:
 - Relay Micro disconnection tester
 - Endurance and Performance Testers for
 - Magnetic Relays
 - Flasher *Timer*
 - Window Heater Timer
 - Wiper/Washer Control
- **2005-2006**, Design, Development and Evaluation of an Electronic programmable Thermostat, Tarbiat Modaress University, Tehran, Iran, Iranian Fuel Conservation Organization, a subsidiary of National Iranian Oil Company, Fund.
- **2005**, Study methods of controlling the polyethylene shield thickness for spiral metal tubes and suggesting a new method to reduce consumption of the materials. Tarbiat Modaress University, Tehran, Iran, Sadid Co. Fund

Skills

- Medical Instrumentation
- Digital Signal Processing
- Peripheral Computer Interfacing system Design
- Data Acquisition boards Design and Utilizing
- Microcontroller system design for ATMEL AVR-RISC (CodeVision, AVRStudio) and MCS-51 series
- Control system Developing, using PLC, Siemens S7-200
- Low power 3 phase PWM inverter and Motor Control system Design
- Digital Electronic Circuits based on FPGA and CPLD (Verilog HDL)
- Programming Language C,C++
- Matlab
- PROTEL
- ORCAD