

Education **K. N. Toosi University of Technology, Tehran, Iran**
M.Sc. degree in Biomedical Engineering 2001-2004

M.Sc. thesis title: **“Deformable Models: Enhancement, Implementation on Special DSPs and Their Application on Cardiac Image Analysis”**, Supervisor: Dr. Hamid Abrishami Moghaddam

(A new segmentation algorithm was developed and implemented on TMS320C6211 DSK)

Seminar, **“DSPs Application on Medical Image Processing”**

Azad Islamic University, Central Tehran Branch, Tehran, Iran
B.Sc. degree in Electrical Engineering, Electronics 1993-1997

B.Sc. project title: **“A 2 MHz Signal Generator”**, Supervisor: Dr. Aziminam.

(A 2MHz signal generator based on Good Will GFG8016S signal generator was designed for Afzar Azma Co).

Technical Experiences **2007-now: Technical Manager in Mayan Communications Technology (Co-founder)**

- Embedded System software and hardware design & implementation
- Operating system design and implementation on Special Purpose DSP and FPGA boards
- Algorithm Design and SW Implementation of:
 - Radio Interconnection Matrix
 - Motor Control Board for surveillance systems
 - Locator Systems
 - IR Thermometer using a thermal camera
 - NTSE & PAL Overlay modules
 - Real Time Image Processing systems
 - Real Time Visual Tracker
 - Real Time Image Rotation

**Technical
Experiences**

2001-2007: Research Manager in Sazeh Pouyesh Co.

- Electronic Control Unit Project Manager in Engine Management Department
We worked as **Robert Bosch GmbH's** Iranian partner in Engine Management System. A localization project was also introduced to design the ECU for EF7 project.
- Design and Implementation of an Industrial General Tester:
An industrial functionality tester for production line to test 2000 devices per day. By simply changing the fixtures, it interfaces with more than 8 products.
- Quality Assurance Representative in R&D
ISO-TS 16949:2002 technical implementation assurance. Technical consultant in all project to insure compliance with APQP requirements and coordinating the cross functional team and R&D design team meetings. FMAE team leader, checking project technical documents to meet the standards and customer requirements.
- Research and feasibility study of Mirror control unit (MCU)
- Technical manager of Power Window Controller (PWC)
- Technical manager of Engine Temperature Control Unit (TCU)
- Technical manager of Ultrasonic Reverse Distance Sensor (URS)

**Technical
Experiences**

1997-2001: R&D engineer in KCR (Kavoshcom Asia)

- Design Engineer in GSM WLL (Wireless Local Loop) team.
- Design Engineer in GSM interface design team for GSM Public Phone.
- Research and feasibility study on GPS and AVL (Automatic Vehicle Location) systems.
- Upgrade board for Factory Monitoring System project (FMS) installed in 2 textile factories. The original system won 12th KHWARIZMI INTERNATIONAL AWARD
- Member of 46/49MHz Cordless design team.
- Design engineer in prototyping of Telephone Line Monitor (TLM)
- Design of KCR webpage (first version)
- Design and prototyping of an intelligent clock that calculated the prayer times.

Projects

K. N. Toosi University of Technology's MVMIP Lab

- Implementation of Star Tracker on DSP.

Sharif University of Technology's Electronic Research Center

- Implementation of ITU Vocodec recommendations on DSP.

Kiatel Co.

- Software design and implementation of GSM interface according to GSM.07.07.
- Keil 7 workshop for Allameh-Helli's robotic group

**Teaching
Experience**

Papers and Publications	<ul style="list-style-type: none"> • M. Takapoomanesh Baghaie, H. Abrishami Moghaddam, “Narrow banded level set model, for cardiac image segmentation”, The Third Iranian Conference on Machine Vision, Image Processing and Application, Tehran University, Feb. 2005
Skills	<ul style="list-style-type: none"> • Expert in embedded system programming, DSP, FPGA, CPLD, uC, etc. • Expert in C/C++, and VC++. • Experienced in analog and digital hardware design. • Expert in 8051 family, TI 2000 family, Microchip PIC, ST microcontrollers and any other microcontroller hardware and software design (assembly and C). • Extensive C for 8051 family programming, using Keil and Franklin development tools. • Expert in VHDL and Verilog HDL. • Experienced in FPGA and CPLD design. • Experienced in industrial PCs and instrumentations. • Expert in DSPs (fixed and floating point) DM64, TMS320C6000 and TMS320C5000 families programming using Code Composer Studio, assembly and C. • EE CAD software: MATLAB, PSPICE, PROTEL (Altium Designer), Altera’s MAX PLUS, Xilinx’s ISE, Aldec’s ActiveHDL, LabView, etc. • Experienced in automotive, military and space design standards and technologies • Expert in quality control and management systems, QS9000, ISO-TS 16949:2002, APQP, FMEA, PPAP, DOE, DFM, DFA, reliability study, etc. • Expert in MS office, Word, Excel, Project, Visio and PowerPoint and computer assembly.
Languages	<ul style="list-style-type: none"> • Excellent command of English.
Courses and Workshops	<ul style="list-style-type: none"> • Project Management, Marketing, ISO/TS 16949:200, ISO 17000, PPAP, APQP, FMEA, POKA YOKE, 5S, Verilog HDL, VHDL, FPGA, C, C++, VC++, LabView • Industrial PCs and Automation • ST micro electronic workshop • Automotive Electrical & Electronic Systems • Hybrid Electric Vehicles Engine Design