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Summary

Electronics engineer with more than 10 years’ experience in a variety of positions and fields, including embedded hardware/software implementation, analog circuit design, test and debug with a great track record of accomplishing projects within limited budget and time.

Technical skills

* analogue, digital and mixed systems
* Microcontroller hardware and software
* signal processing
* Power supplies
* DC/DC converters and battery management
* C, C++ and assembly
* Test and debug
* Schematic and PCB
* Visual C#
* OLE database with Visual C++
* EMC and EMI
* Installing industrial equipment such as pumps, valves, motors and sensors
* Training customers and writing manuals
* Predict future problems and providing best solutions during design stage
* Proficient in embedded control systems design and familiar with PLC
* Serial and wireless communication standards like RS485, RS232 and ZigBee

Soft Skills

**Problem solver:** Actively seeking and resolving technical and operational problems.

**Teamwork:** Extensive experience in team projects at different levels.

**Independent:** Able to work without being supervised; with preference for handle barriers in person.

**Supporter:** Eager to mentor colleagues and help them to debug their works.

**Computer:** Working with basic programs such as Microsoft Project, Word, Excel and PowerPoint.

**Time management:** committed to do the job in time with prioritising tasks, working with a fast pace or even over-working.

**Language skills:** Writing concisely, excellent at reading especially technical texts.

**Hands-on Engineering:** Involving closely and directly in all tasks of projects.

Attributes

* Action-oriented
* Co-operative
* Organised
* Detail-oriented
* Tolerant
* Can-do attitude
* Willing to learn, quick to pick up new skills
* Creative
* Avid traveller
* Seeking out new responsibilities regardless of reward

Experience

**Embedded designer, Analogue designer** 2005-2015

**Pardazesh Basamad Ltd.**

An agile, small size, high-tech Company performing control and R&D projects

Responsibilities:

* Designing hardware of digital systems; schematic and PCB
* Programming embedded systems with C
* Developing GUI for control applications with visual C#
* Working with OLE databases with visual C++
* Performing some mechanical calculations and interfacing electronic concepts with mechanical requirements
* Designing and implementing serial protocols for wireless projects
* Choosing and setting up platforms; ARM, PIC and AVR microcontrollers, Piccolo and floating point DSP’s
* Negotiate with the costumer, providing solution and choosing platform
* Interfacing Industrial elements with control system including SSR, speed controller, PT100 sensors, electronic eyes and encoders
* Planning and teaching costumers training courses
* Proof-of-Principle, Form Study and/or functional prototyping
* Implementing battery management functions in hand-held products
* Working on legacy codes, debugging and improving

Achievements:

* Suggesting a new communication system in a parking management/guidance system, led to wiring costs being halved; using WSN, Ad-Hoc and wireless technologies
* Developed a low-cost reliable embedded system to control chemical and pharmaceutical manufacturing systems with complicated processes
* Eye-catching records of budget and delivery time for 4 embedded control projects
* Developed an automatic system to test digital cards of up to 80 I/O’s

**Digital electronics engineer, Driver/Firmware developer** 2002-2005

**Basamad Negar Ltd.**

Developer of laboratory and broadcast products

Responsibilities:

* Digital hardware designing; schematic and PCB
* Developing peripheral drivers for DSP and microcontroller in C and assembly
* Implementing simple GUI’s with visual C++ 6.0
* Designing signal processing algorithms
* Designing and testing analogue interfaces and high precision circuits
* Proof-of-Principle, Form Study and/or functional prototyping
* Planning and teaching costumers training courses

Achievements:

* Break the record of 100MS/s sampling rate and 13.5 ENOB with an acquisition board
* power supply tuning and protection, controlling battery charging process with DSP
* Cut the hardware cost of future projects by 80% suggesting and developing a general purpose SDR platform

**Signal processing group member** 2000-2002

**Professor Hesabi organization (NGO)**

A scientific and research NGO

Responsibilities:

* PCB design, montage, primary tests
* Developing DSP drivers with assembly
* System test and evaluating

Achievement:

* Part of team succeed to research and develop a portable battery-powered ANC

Education

**M.Sc. in Digital Electronics Engineering 2000**

**Sharif University of Technology (ranked 601 worldwide)**

Thesis: Debugging method for parallel-processing DSP systems

Implemented in a platform consisting 4 microprocessors

Main courses: EMC, Advanced electronics, Mixed-mode systems

**B.Sc. in Electronics Engineering 1998**

**Sharif University of Technology** **(ranked 601 worldwide)**

Final project: Implementing a narrowband FSK transceiver

Controlled and used by a MCS-51 microcontroller

Main courses: Applied electronics, High frequency electronics, Integrated circuits application laboratory

Computer Skills

Altium/DXP/Protel 99SE

Keil uvision Microsoft C#

TI code composer Microsoft VC++

Code Vision Analog Devices simulation programs

Awards

3 silver medals from physics, mathematics and computer students Olympiads, 1993

2nd place in university scientific competitions among 150 students, 1998

8th place in national electrical/electronic engineering Olympiad, 2000

Outside interests

Chess (Fide Rating: 1624, North shore club team member) Team sports

Hiking Classical music

Psychology Travelling

\*Referees available on request