Younes Amini

Personal Information

Instrument and Control Engineer, Analog and Digital Circuit Designer
Birthday & place: 05.1.1982, Tehran, Iran   **Marital status:** Single
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Work History

December 22, 2012
Head of Research and Development-Electronic Department, Pars Jahd Company, Tehran

- **Embedded Programming HART protocol for AVR microcontroller by C ++ language**
- **Embedded programming ARM 9 (AT91RM9200), Cortex M3(LPC176x) in IAR IDE and debug**
- **Embedded programming in RTOS such as: embOS**
- **Implementing Digital PI Controller for controlling proportional Valves in pneumatic system**
- **Design and construction industrial instruments such as:**
    - Pressure gauge calibrator, Level transmitter calibrator, Remote seal filling bench with Siemens PLC S7 313, Industrial 4 – 20 mA indicator, Flow recorder controller, 3 Channel pressure recorder controller, Current to pressure converter (I/P) calibrator and Digital power supply With adjustable voltage and current output and 12 Channel Industrial recorder
- **Proficiency in working with industrial equipment such as:**
    - Spectrum Analyzer, Oscilloscope, Function Generator, Arbitrary Waveform Generator, Tracking Generator, Soldering and Disordering Station, LRC Meter, Multimeter
- Achieving and studying standards such as:
    - ATEx ،NIMA ،IP ،SIL ،NIST ،CE
- Reverse engineering instrumentation electronic circuits such as:
    - Positioner, Field Indicator and Pressure transmitter
- Installation, setup and knowledge about concept of industrial network such as:
    - HART protocol, Profibus, fieldbus
- Serial communication protocols such as:
    - USB, JTAG, SPI, USART, I^2C
- Designing and construction of electronic circuit board of Instrumentation Instruments by AVR microcontroller:
    - Alphanumerical LCD, Graphical LCD, ADC (12,16,24 Bit), DAC (8, 16 Bit), 7Segment Driver, Stepper Motor Driver, Real Time Clock, Optoisolator, Relay, PWM, Boot Loader, MMC/SD Card, USB driver
- Designing electronic circuit based on intrinsically safe standard

October 28, 2006
Web designer, Network and Computer maintenance , Aysan Gity Gostar Company, Tehran

- **Designing shopping websites:**
    - by Joomla and JoomShopping on Linux server with CPanel web hosting control panel
- **Setup and maintenance of computer and network:**
    - UPS, Hubs, Switches and Router for developing intranet networks
- **Experience working with:**
    - Red Hat and Suse Linux as mail server

Certification

- Employment license by engineering organization ,Tehran construction engineering organization ,8 July 2017
- PLC S7-300/400 Level 1, Tehran Institute of Technology, February 14, 2014
- PLC S7-300/400 Level 2, Tehran Institute of Technology, April 11, 2014
- Drive AC, Tehran Institute of Technology, May 21,2014

Education	**Master of Science in Nanomaterial Engineering**
	Materials and Energy Research Center, Tehran, September 22, 2010
	Bachelor of Science in Electrical Engineering
	Shiraz university, Shiraz, September 22, 2006
Language	**English:** Fluent (Reading, Writing, Speaking & Listening)
	French: Intermediate (Reading, Writing, Speaking & Listening)

Teaching History

September 22, 2016

University Teacher , Islamic Azad University, Damavand (SAMA)

- **Teach courses such as:**
  - Industrial Electronic Lab, Electrical Machines I, Electric Circuit Theory

February 1, 2016

University Teacher, Applied Sciences and Technology, Damavand

- **Teach courses such as:**
  - Applied Electronics Lab, Electric Circuit Theory, Introduction to designing of electric power Control System, Introduction to designing of electric power Control System Lab, Distributed Control Systems

January 21, 2015

University Teacher , Islamic Azad University, Damavand

- **Teach courses such as:**
  - Special Electrical Machines, Industrial Electronic, Industrial Electronic Lab, Electrical Machines II Lab, General Workshop, Electricity Workshop

Professional Profile

- Good understanding of **team work**
- Coding **AVR** microcontroller by Codevision and **Atmel studio IDE**
- Coding **ARM** microcontroller by **IAR** IDE
- Programming, synthesizing, simulating, implementation of the **Xilinix FPGA** program with **Verilog** language
- Computer program coding based on object-oriented programming with **C + +** by **visual studio** IED and Rational Rose
- **Reverse engineering** electronic circuits and devices
- Design **high frequency** single, two and four-layer and multilayer PCBs By **Altium DXP**
- Strong knowledge about **signal integrity** issues such as:
  - Reflation, termination, Controlled impedance , EMI, Crosstalk, Differential traces, Power distribution, High frequency Losses lines, Short Wavelengths, Control trace temperatures
- **Soldering** and assembling surface mount device (**SMD**)
- Designing **switching Power Supply**
- Experience of working with Siemens **PLC logo, S7 300/400** series
- knowledge about standard such as:
  - **ATEX** Standard: IEC 60079-0 ,IEC 60079-1, IEC 60079-11, IEC 60079-25, IEC 79-3
  - **EMC** IEC61326-1
  - **IP** Standard: IEC60529, ISO
  - **NEMA, SIL, NIST** standards
  - **Safety requirements for electrical equipment** (IEC 61010-2-030)
- Setup and have knowledge about concept of instrumentation equipment such as:
  - Pressure transmitter, Temperature transmitter, Recorder, Level Switch, Level Transmitter
- knowledge about Industrial Network such as:
  - **Profibus, Foundation Fieldbus, HART and DCS**
- Setup and have knowledge about pneumatic instrument and systems
- Ability of programming with Matlab, C++, C#, PHP, HTML, CSS and Assembly
- Designing static and dynamic website with and without content management system (**CMS**)
- Setup and maintenance of computer networks (**Network+**)
- Maintenance of personal computers and servers (**A+**)
- Material analysis with SEM‹TEM ‹BET ‹XRD ‹VSM

Software	▪ **Electrical - Electronics:**
	○ Altium DXP, Atmel Studio, Proteus, Pspice, Codevision, AIR, Smart Vision, SAM-BA, Simatic manager, Logo Soft Comfort, Autocad Electrical
	▪ **CAD:**
	○ Solidwork
	▪ **Software design and IDE:**
	○ Rational Rose, Visual Studio
	▪ **Project design:**
	○ Microsoft project, Microsoft Visio
	▪ **Design Website:**
	○ Cutftp, Direct Admin, Cpanel, Smart Ftp, Joomla, Mambo, PHPNuke, php admin, Wampserver, mysql
	▪ **Graphic:**
	○ Corel Draw, Adobe Photoshop, Adobe Dreamweaver, Adobe Acrobat Pro
	▪ **Material Analysis:**
	○ PANalytical X'Pert
	▪ **Operating Systems and Networks:**
	▪ Microsoft Office, Windows Server
Publication & Articles	▪ International Conference on the Advancement of Material and Nanotechnology 2010, University Teknol Mara, Malaysia.
	▪ ERMS Fall Meeting Warsaw University of technology 2010, Warsaw, Poland.
	▪ 3rd International Congress on nanoscience and nanotechnology (ICNN 2010), Shiraz University, Shiraz, Iran.
Other Activities	▪ Poster Design of The first national conference of refractory materials, Materials and Energy Research Center, Tehran, April 15, 2010
	▪ Teaching Robotic (line follower robot), Javan Institute, September 23, 2007