

## ASHKAN GOLESTANI

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### PROFESSIONAL PROFILE

Organized, MSEE, detail-oriented Engineering Professional effective in maximizing resources to deliver quality solutions for projects. Proactive Engineer with significant experience in Design Hardware, Develop Firmware and Software. Excellent oral and written communicator who excels at leading and managing teams and projects. Exceptional interpersonal and motivational skills coupled with commitment to excellence in meeting and exceeding goals and objectives.

### BACKGROUND SUMMARY

- Project Leadership
- Product/ Resource Management
- Self-motivated
- Technical Consulting
- Continuing Process Improvement
- Technical training
- Cross-functional team
- Debugging Firmware
- Debugging Software
- PCB Layout
- Electrical drawing
- PCB Prototype to production
- Product Validation
- Failure Analysis
- Firmware Development
- Software Development
- Hardware/Schematics Design
- Source/Version Controlling
- Real-time OS
- Maintenance and Troubleshooting
- Project support

### TECHNICAL SKILLS

- MIPS/ARM/MCU/PIC 8,16,32
- C, C++, VC++,C#.Net ,VB.Net
- VHDL,FPGA
- Analog & Digital Circuit Design
- Altium Designer
- Linux Kernel
- FreeRTOS/μC/OS-II,III
- Code Composer/TI-RTOS Kernel
- Eclipse/Silicon Lab
- μVision4 IDE- ARM Utilities
- Version Control SVN/Git
- Peripherals I2C/SPI/USB/UART
- OOP/OOD/API
- Microsoft Project
- Documents writing
- Ladder logic , PLCs(AB)
- SCADA System programming
- ISO, ANSI, OSHA, NEMA

### PROFESSIONAL ACCOMPLISHMENTS

#### **NKK Switches,** *Senior Application Engineer*

**05/2016-present**

Conceive, experiment with, and present modular architectural approaches for firmware applications. Video/Image processing in Kernel Linux/Windows (ARM Cortex-A8) Cross Compiler toolchain Linaro. ARM Cortex-M using GCC.

#### **DeVry University , ITT,** *Part Time Professor*

**04/2004-present**

Teaching in three fields (Electronics, Computer, IT). Following courses: Circuit design, Microprocessors (CPLD, FPGA, Microprocessor, PIC Microcontroller,HCS12X). Programming (VHDL, C++, VC++,C#, Python ,Assembly, Basic, VB, and VB.Net), Industrial controller MicroLogix1100, LabView.Networking, CISCO (CCNA1 & 2).

#### **Dril-Quip,Inc.,** *Advanced Specialist Electronics Engineer*

**08/2014-04/2016**

#### **Designed/Developed control equipment(SCM).**

Senior Lead Control Engineer , Design 16 Channel Analog board (12bit)(4-20mA)(0-5V), Design 32 channel Digital Board.Using Peripheral Buses UART/ Modbus /Ethernet protocols. Using PIC18 and PIC3x. Model-based design to simulate and investigate real time problems. Monitor weekly activities/deadline. Interfaces with Valves, Motors, Solenoid ,monitoring ,etc. Experience with Source Control (Subversion, Git).

#### **Designed/Developed Router equipment(SREM).**

Focusing on Firmware, Design new boards(Schematics /PCB /Prototype /Production), Master Controller board(Cortex-M4/M3) Using GCC with Tiva in CCSv6 ,Power management TPS6x/TPS3x, Communication distribution(SBLxx), Power distribution Board (C8051F55x)  $\mu$ Vision4 IDE; monitoring and measuring of each board condition(Voltage/Current/Temp/Pressure).Design Routing control Module (Boards, Firmware, Communication) . Electrical drawing and Documentation and test to meet the design validation. Designed for High Temp and High pressure environment.

**Saipem America,**

**06/2009-08/2014**

***Robotics Lead Control System Engineer***

**Supervised/Developed Pipe Repair System.**

Lead to follow the progress, Provides technical support to project team, implements detail engineering activities. Members of a cross-functional teams(Hydraulics /Mechanics/ Asset/ Purchasing) .Using Matlab to test the models. Design/ Test/ Troubleshooting of custom Boards using FPGAs, Xilinx Series, C8051F58x. Develop the HMI, specifying the sensors and valves .Saving up to \$200K material by creating Laser touch switch for Enclosure boxes of 15 Control system and providing upgrade kit and cutting replacement time from 4 weeks to one week . Supervisory for FAT&SIT.

**Designed/Test/Troubleshooting of the Remote Operated Vehicle (ROV).**

Worked with vendor to identify product application issues. Collaborated with the vendor to improve the product design to meet the final project specifications. Full board design life cycle from concept, Schematics, Layout, BOM and generating Gerber files, Prototype, Production release, Version control of hardware and Firmware , for Multi I/O(digital/analog) configurable for number of I/O, including Gyro and accelerometer to determine Altitude and latitude(Cortex-M4/M3) . Develop HMI using C# to control the ROV from surface. .Design to meet the hardware specification and project, Profession in debugging the Software/Firmware to insure pass the engineering validation.

**ROPER Industrial(Metrix),**

**03/2007- 06/2009**

***Hardware Design Engineer***

**Designed Turbines Controller Boards for NASA.**

Design, development, Troubleshooting, testing of Vibration, Temperature and Pressure controller (Turbines, Generators) at high range of measurements and monitoring by analog circuit and using DSP C55x.Develop Firmware and Software (VBScript,C#).Design for harsh industrial environments.

**Improved existing test and Calibration equipment.**

Update the design to allow increase testing capabilities. Incorporated user feedback to design equipment that was easier and safer to use. Managed the production of the new equipment through various vendors. Result: Testing was expanded to new sizes and performed in a safer manner than had been previously; Test costs reduced significantly.

**Thompson Company,**

**01/2004-03/2007**

***Electrical Engineer***

**Design Control system for Multi-purpose production**

Design the systems to use in Hazardous environments Calss1 Div1. Programming and design the motion Checkweigher ,Motion control, Universal Filler , weight packaging machinery using PLC(AB) to offer the customers low to high speed conveyers rates ,small to high size of packaging ,with wide variety of programs for filling . Custom design controller for High speed conveyor.

Data collection and generating report by developing new software .Selecting motion sensors, laser, metal detector .

Deign the system motor control for Rejection. Control system for single and multiple line of production.Design the Heavy-Duty Reject Checkweigher for limited space.

## **Education**

***Evaluated in the United States of America by World Education Services, Inc. (WES)***

***Course-by-course analysis***

***07/02/1995-06/02/1997*** Master of Science in Electrical & Electronic Engineering.

***07/02/1993-04/01/1995*** Bachelor of Science in Electrical & Electronic Engineering.

***07/01/1991-05/01/1993*** Technical Associate in Electronics.

Average GPA:3.5