Embedded System Engineer Resume Example

Victor H. Griffith
2291 Flinderation Road
Burr Ridge, IL 61257
Phone: 708-319-2720
Email: vhgriffitch@freemail.com

Career Objective:

To obtain a embedded system engineer position with an electronics company where my electrical and programming skills together can help in the design and development of microprocessor for various devices.

Summary of Skills:

- Strong experience in embedded systems product development
- Excellent knowledge of electrical embedded systems and microprocessor
- Skilled in reading and interpreting blueprints and schematics
- Ability to develop software and perform debugging
- Excellent skills in C, C++, and developing test specifications and plans
- Familiarity with the designing, testing, and construction of motor design
- Adept in working with the latest lab equipment

Work Experience:

Embedded System Engineer
Force Group, Burr Ridge, IL
June 2012 - Present

- Analyze and develop system and software requirements according to customer's specifications
- Create and maintain software design, and associated documentation
- Use standing coding practices and create software package
- Integrate software in devices and perform unit and integration testing
- Develop effective embedded system solutions for existing and new devices
- Assist in software verification and solving software issues
- Test and fix code, write reports, and develop training manuals for customers

Embedded System Engineer
LMBC Company, Burr Ridge, IL
April 2010 - May 2012

- Developed design concepts and assemblies of various medical and commercial devices

- Created digital circuit design reading customer's requirements
- Developed test and measurement code to be used in production
- Researched, analyzed, and verified compliance with regulatory for all products
- Support in software and hardware development and solving development problems
- Developed and implemented optimize signal processing algorithms
- Developed test and validation plan for system testing

Education:

- Bachelor's Degree in Electrical Engineering
  St. Xavier's College, Burr Ridge, IL
  2009

Reference:

On request.

Raul Sanchez
123 Any St.
Indianapolis, Ind. 00000

rsanchez@email.com
000.555.1212
www.Robotman.com

LinkedIn ♦ Facebook ♦ Collaborator ♦ Robotman Blog ♦ Twitter

Embedded Software and Robotics Engineering Professional

Futuristic engineer and bona fide expert in embedded software and architecture looking to fuel my fervent passion for cutting edge technology by developing next-generation robotic systems and creating tight, bug free software and code on a contract basis.

- Experience researching, designing, developing, testing, debugging and optimizing robotic systems in companies serving the automotive and manufacturing industries.
- Adaptable to changing requirements while producing quality software within tight deadlines.
- Proven history of increasing production volume or precision in high-throughput operations.
- Able to create algorithms or programming code for ad hoc robotic applications.
- Familiar with a wide variety of programs, test equipment, embedded systems software, architectures and peripherals such as welders, controllers and other equipment.

Technical Highlights

Languages: C, C++, C#, Java, Visual Basic, SQL, FORTRAN, Python, .NET
Utilities: Matlab/Simulink, Simpack QT-Scripting, FANUC ROBOGUIDE, ABB RobotStudio.
Operating Systems: Windows, RSLogix 5
CAD Packages: SolidWorks, FVA work bench, Pro E, AutoCAD.
Analysis Packages: MSC Visual Nastran, DRESP, SIMPACK.
Complete technical profile and coding samples available at www.robotman.com

Project Highlights

"Robot Man is my go-to resource for design, coding, testing and algorithms."
John Jones, Engineering VP, Reliable Robots

Reliable Robots, 9 month project
Environment: C/C++, Python, Git, Jenkins
Developed robotic algorithms and software for Dexter, an industrial robot that performs a variety of repetitive production tasks alongside people by exhibiting behavior-based common sense.

- Developed robust vision applications, focused on parts detection, localization, inspection.
- Created GUI Interfaces to vision algorithms.

- Worked with QA team to test and improve Dexter and customer satisfaction.

Automotive Robots LLC, 6 month project
Environment: Allen-Bradley PLC applications and human-machine interfaces
Troubleshot and resolved problems with robotics systems interfacing with PLC programs, operator interfaces, motion systems and vision systems. Interfaced with clients.

- Designed, analyzed and troubleshot circuits in automated work cells using PLC's and/or relays.
- Collaborated with other engineers on design and integration of cellular production work centers.
- Optimized robotic applications to maximize production output and reduce downtime.

Prize Engineering, 12 month project
Environment: C#, C++, .NET
Designed operating software for a variety of robots and end of arm tools used in auto manufacturing.

- Converted detailed logical flow chart to object oriented C++, C# and .NET programs.
- Participated in code review meetings and created test plans for integration and module testing.

Automated Systems, 4 month project
Environment: C, C#, SIMPACK
Participated in all aspects of designing, architecting, programming, testing and debugging of applications for a brand new line of manufacturing robotics.

- Developed technical solutions that fit customer specifications.
- Assisted with front-end graphical user interface design.
- Coordinated multiple build activities and assisted with testing and debugging of lab prototypes and beta software utilized on customer sites.

Manufacturing Solutions, 6 month project
Environment: C, C++, Java
Designed embedded firmware for new robotic assist systems and unweighting treadmill systems, as well as other platforms under development.

- Developed new products by collaborating with design engineers.
- Project scope included concept generation, designing specifications and algorithms, creating firmware, debugging, developing test plans, testing, documentation and transferring products to manufacturing

Ford LAP, Robotics Engineer, 2 years (full-time position)
Developed programs for the assembly of windshield and side glasses by interfacing the robot with the PLC and optimizing the vision system and cycle time.

General Motors, Development Engineer, 3 years, Embedded Software Engineer, 2 years (full-time positions)
Developed system requirements and use case specification documents. Developed, maintained and optimized a variety of apps, algorithms and architectures in embedded systems.

Education, Training and Certifications

University of Pittsburgh, B.S. in Computer Science, minors in Electrical Engineering and Mathematics.
Michael Barr's Embedded Software Boot Camp
Allen-Bradley PLC Training Courses
Certified Robotics Engineering Associate I (CREA I)
Certified Robotics Engineering Associate II (CREA II)

Affiliations and Publications

Member: Association for Computer Machinery and Open Source Robotics Foundation
Follower and Occasional Contributor: Embedded Gurus, Ganssle Group, Embedded.com
Articles and Posts: www.robotmanblog.com
Open Source Projects: ROS and Gazebo

Embedded system engineer Resume

Title
Embedded system engineer

Primary Skills
C,C++,Linux,Vxworks,uc/os-ii,RT linux,8051,ARM,keil

Location
India-Bangalore (will consider relocating)

Posted
Dec-16-09

RESUME DETAILS

CAREER OBJECTIVE

To gain a dynamic and challenging role in the area of electronics and communication engineering that will offer me the best opportunity for further development of my abilities, skills and knowledge in an established firm with long-term career growth possibilities.

WORK EXPERIENCE
Company: Sigma Computing Solutions Pvt Ltd, Hyderabad
Position: Software Engineer (Embedded Systems)
Period: January 2008 -- April 2009
PROFESSIONAL SUMARY

• A professional software engineer with nearly 1 year of experience specializing in the field of embedded systems.
• Experience in the software design process for a particular target microprocessor or controller.
• Areas of expertise include embedded domain like mobile application development.

TECHNICAL EXPERTISE

Programming Languages :C,C++

Operating Systems : Windows, Linux
Protocols : I2C, SPI, RS232,CAN
RTOS : uC/OS-II
IDE : Keil
Micro controllers :8051 core -- AT89C51/52
ARM Core -- ARM7TDMI-S(LPC2103/06, LPC2148)
Linux Tools :GCC, Cygwin

PROFESSIONAL EXPERIENCE AND DETAILS

Project :AP_BX
Client :Megasoft
Team size :5
Duration :10 months
OS Platform :Windows XP
Tools :Keil, LPC2000 flash utility, Eclipse
Micro controller :ARM7TDMI-S(LPC2148)
Technologies :RFID, NFC, and Touch sensing technologies

Details
AP-BX project enables “Touch and transact” method for mobile users to participate in value added services being offered by mobile operators. Using their handsets, users can carry out transactions such as bill payments (postpaid), content downloads, recharge their prepaid connections etc.
Mobile users can perform cash-less transactions for prepaid recharge, electronic bill payment, and access digital content, etc. All this with easy-to-use, simple but intuitive touch of their handset to 'target icons'.
This solution with anytime, anywhere electronic talk time charging and bill payment in self service mode offers Mobile Network Operators (MNO's) a quantum leap in operational efficiency of their revenue assurance systems. It simplifies and speeds up day-to-day mobile transactions by their customers, qualifying it as an ideal replacement for smart cards being used for multiple applications today.
Responsibilities
1.Design of the hardware circuit for the poster
· Design of antenna circuit using NFC RFID reader module.
· Design of eight input touch pad circuit using QT1081 touch controller.
· Design of standard LPC2148 circuit.
· Interfacing all hardware sub modules
· Optimizing and upgrading the circuit design in terms of size and as per changing requirements.
2.Writing software for sub modules.

3.Testing individual and integrated modules(hardware & software).

PROFESSIONAL STRENGTHS

• Goal oriented, having a positive perception, committed to work with a positive frame of mind with good communication skills and interpersonal skills.
• Versatile team member, believe in hard work as well as smart work and simultaneously continuous learning & contribution to the organization.
• Good analytical strengths and combined knowledge of Electronics and Embedded Systems.

MINI PROJECTS DONE DURING EMBEDDED SYSTEMS TRAINING PERIOD

1)Implementing steganography using BMP images

Steganography is the science of writing hidden messages. Steganography includes the concealment of information within computer files such as a document file, image file, program etc. The advantage of steganography, over cryptography, is that messages do not attract attention to themselves. whereas cryptography protects the contents of a message, steganography can be said to protect both messages and communicating parties.

2)8051 based temperature monitoring system using GSM technology

The objective is to continuously read the temperature of a place and send an SMS to a mobile whenever the temperature exceeds a set upper and lower limit. LM35 precision
temperature sensor is used to read the temperature. An ADC(ADC0804) converts the analog data into 8-bit digital data and is given as input to AT89C51 microcontroller. The controller processes the data as required, compares it as against the upper and lower acceptable temperatures and sends an SMS to a stored mobile number. Sending SMS is accomplished by sending appropriate AT commands to a GSM modem which is interfaced to the microcontroller using the serial communication pins of the controller .

EDUCATION

Sl.No Passing Year Institution Qualification Percentage
1 2000 St.Dominic's High School, Hyd SSC 79.67%
2 2003 Ratna Junior College, Hyd Intermediate 93.5%
3 2007 Bhoj Reddy Engineering College for Women, Hyd B.Tech (Electronics & Communication) 66.82%
4 PG Diploma in Embedded Systems from Sigma Computing Solutions Pvt Ltd

Certifications

See above