### **ANUROOP M**

Flat no: 601, GR Sagar Nivas, Naganathpura, Hosa road, Bangalore 560100, Karnataka, India Contact: +91 9611 805900; Email: anuroop.m@gmail.com; LinkedIn: https://www.linkedin.com/pub/anuroop-m/4/779/7a6

<Date>

<Name>

With reference to your Advertisement in ----- dated ----- undersigned present myself as an important incumbent for the same.

I am submitting my resume to express my keen interest in the position of <position vacant> in your company.

Review of my credentials will indicate that I am a qualified and high performing individual with excellent professional and technical skills achieved via rich cross-functional exposure across the industry. I am an innovative thinker, able to apply analysis and creativity to problem solving. I am a highly personable, self-motivated and diligent individual with flexibility to adapt to new situations.

As an Embedded Engineer, I am competent in developing embedded applications. Demonstrated capabilities in providing technical support and structuring customized solutions to meet customers specific needs; well versed with designing, coding, testing and de-bugging applications with hands on experience in maintaining documentation for the same.

Currently spearheading with ORCA Systems Pvt Itd as Staff Engineer-Software. Possess in-depth knowledge of all phases of Software Development Life Cycle with concentration on requirements analysis, technical systems design, development and implementation. Familiar with SOC software with Boot loader design and implementation, Embedded C, and Software System design, development of BSP and drivers, Algorithms and Data structures.

My competencies include Embedded Design & Development, System Study, Requirement Specification Study, Product Design & Development, Customer Interaction, Planning & Programming and Coordination. Driven by high energy levels and professional competence. I am confident of making visible contribution to company's growth and profitability objectives.

A tour through my enclosed resume shall take you through the details and I am confident, in my credentials you would find a perfect fit for the said job. Thanks for sparing your time.

Thanking you in anticipation, for an opportunity to be a vital part of your organization.

Yours sincerely,

Anuroop M

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# PROJECT MANAGEMENT/ EMBEDDED SYSTEMS/ SOFTWARE ENGINEERING/ DESIGN & DEVELOPMENT

Offering over 10 years of experience across the industry with expertise in:

Strategic Planning ~ Project Management ~ Embedded System ~ Software Development ~ Process Improvement ~ Design and Development ~ Implementation & Support ~ Client Relationship Management ~ Team Management

- ✓ Highly experienced techno-commercial professional with a gratifying career in the areas of **end-to-end Project**Management/ Implementation, Embedded Systems, Software Development, Product Design & Development, R&D and

  Team Management. Currently spearheading with ORCA Systems Pvt Itd as Staff Engineer-Software.
- ✓ Possess in-depth knowledge of all phases of Software Development Life Cycle with concentration on requirements analysis, technical systems design, development and implementation. Familiar with SOC software with Boot loader design and implementation, Embedded C, and Software System design, design, development of BSP and drivers, Algorithms and Data structures.
- ✓ Proven Project and People management skills coupled with professional competencies in mobilizing and judiciously managing resources with structured inputs in the domains of project planning, scheduling, designing, development and implementation while ensure project accomplishment within defined time/ cost parameters.
- ✓ Focused and hardworking professional equipped with thorough knowledge and technical understanding and engineering skills coupled with an analytic bent of mind and confident to take challenging assignments.
- ✓ Keen planner with exceptional analytical, problem solving and interpersonal skills. Excellent communicator, Strong leader & team builder with the ability to handle multiple functions and activities with tight deadlines.

#### **Technical Forte**

- ✓ Employ highly developed Debugging skills.
- ✓ Test case development and test plans.
- ✓ RTOS Concepts, with experience of RTOS's like uC linux, vxWorks.
- ✓ TCP/IP, and Ethernet drivers, And L2 and L3 protocols
- ✓ Xilinx FPGA's and its software drivers.
- ✓ I2C, SPI & USB protocol and its drivers.
- ✓ Image processing algorithms & MPEG2-T2 streams.
- ✓ GTK application Development in linux.
- ✓ MSVC .net application Development in Windows.
- ✓ Boot loader coding and SOC software.
- ✓ Xilinx EDK and JTAG debugger.
- ✓ Linux internals & Linux Device drivers.
- ✓ Bluetooth Protocol Stack.
- ✓ ARM processors and debuggers.
- ✓ Android based software systems. (including driver & Applications)
- ✓ Concise and quick administer repairs of system & extremely task driven.
- ✓ Assembly language programming for processors like Intel 8086, IBM PPC 405, Xilinx Microblaze, ARM 9, IMG META.
- ✓ Design and Develop communication protocol stacks

### **CAREER CONTOUR**

# ORCA SYSTEMS PVT LTD since Apr'07

### **Individual Contributor/Staff Engineer Software**

- ✓ Implement project plans within preset budgets and deadlines; holding review meetings to ensure timely completion and delivery of projects; defining best practices for project support and documentation.
- ✓ Record business requirements and business process; preparing scope of implementation and analysis; devising the functional and technical specifications; setting-up the master files & function locations and importing the relevant data.
- ✓ Worked in close coordination with other Project Leaders for ensuring timely planning during key projects.
- ✓ Handle programmes for multiple customers involving various product design services (Hardware, Embedded & Application Softwares).
- ✓ Execute variety of embedded projects involving complete development (concept to product delivery), reverse engineering, maintenance and testing projects based on embedded controller.
- ✓ Lead the Group of Embedded Software Engineer and carried out the Embedded Software development for Scanning Group from Bangalore offshore Centre.
- ✓ Involvement in requirement analysis, customer interactions & meetings for understanding and freezing product technical requirements.

- ✓ Design, develop, test, troubleshoot and debug the applications and manage smooth implementation and testing of product features.
- ✓ Participate, arrange and drive the review meetings; involved in communication and support to customer on key issues.
- ✓ Use Compliers, Assemblers and Debuggers in developing Embedded System Software. Create portable code, design & code optimization, and fixing existing bugs efficiently.
- ✓ Analyze designed Systems, solve complex issues in the product.

## **CG-COREEL PROGRAMMABLE SOLUTIONS**

Sep'03-Apr'07

**Embedded Software Engineer** 

## **SCHOLASTIC PORTFOLIO**

MS (Software Systems); 2014 BITS Pilani, Rajasthan; CGPA 8.37/10

**BS (Information Systems); 2009**BITS Pilani, Rajasthan; CGPA 6.9/10

Diploma in Computer Engineering; 2003

NTTF Bangalore; 85%

Date of Birth: 23<sup>rd</sup> October 1982

Passport No: L8333396

Reference: Available on Request

Note: Please refer to Annexure for Project Details

### **ANNEXURE: PROJECTS HANDLED**

Project Title SOC Software Client ORCA Systems

Synopsis This was done for an Orca SOC, which has a Demodulator core and Tuner core. And this chip supports

universal TV standards. I have developed the GUI (C++) to configure and switch standards on the fly and to change channels in each standard. I have developed a secondary loader protocol which fetches the real boot image from a host machine and configure the target chip. This image is in a compressed form, on which the secondary loader unpacks and interprets the correct commands and configure the target chip accordingly and at the end of the boot, it passes the control to the new image loaded. I have designed, developed & tested this protocol. The output of the chip was collected through the Cypress USB chip to a PC. I have developed and the firmware to support this. This was developed fully in embedded C. Along with this I have implemented a driver to interact to orca preparatory tuner. This also was developed in C. The entire software

was done and presented in CES show in Las Vegas 2014

Project Title EVM

Client Dataway Solutions

Synopsis This was a freelance project single handedly done by me. This is an electronic voting machine. The project

had entire software system design including boot code, BSP, uClinux porting, application server to talk to many devices over RS232. It includes development of drivers for I2C and Finger Print modules, led panel driver, GPIO switches etc. This has a custom protocol server, which deals with data and control transfer

between devices. This was fully tested and satisfied by client. This was fully developed in C in Linux.

Project Title CHIP CONTROL SOFTWARE

Client ORCA Systems

Synopsis This was developed for controlling and testing the functionality of the Bluetooth and RF chips. This was done

single handedly by me. This includes Design and Development of entire GUI and the functional flow behind it. This was developed in C++ and GTK platform on Linux. I have developed custom network drivers for normal users to create raw packets on Linux. This gave a good experience in L2 & L3 protocols in Linux. This includes FPGA programming on Microblaze, I2C driver to talk to chip, L2 protocol driver on FPGA and an application to

control the flow in FPGA etc.

Project Title SAHASRA

Client Netlogic Semiconductors

Synopsis This project was done for NetLogic semiconductors Pvt Ltd. I had developed the test suite for the Cynapse

software (which holds the algorithm of an offload engine). Developed the Test plans and implemented it,

Developed lot of scripts to manage the reports. This was developed in C language.

Project Title RPR CORE Client CG-Coreel

Synopsis Project is implementation of RPR core. RPR core is implemented two sections, the data handling in FPGA &

control handling in the software. The following standards/documents were considered during development.

IEEE standard, 802.17, Resilient Packet Ring (RPR) access method & physical layer specifications.

Project Title UCLINUX ON MICROBLAZE

Client CG-Coreel

Synopsis The project is to port uClinux RTOS on Xilinx Microblaze platform. I had Developed hardware with Microblaze

processor. UART and Ethernet were added as a peripheral component in Virtex 2 pro FPGA from Xilinx. Microblaze was configured with UART as console port, L2 and L3 layer protocols were configured and an

application running on top of uClinux. This was done in Embedded C.

Project Title BSP & DRIVER DEVELOPMENT FOR PPC 405 BASED BOARD

Client CG-Coreel

Synopsis Project was based on developing the entire control system for ship. It contains five independent systems one

DMU (Data Management Unit) and four FSK-LIU (Frequency Shift Keying – Line Interface Unit) systems. All inter system communication was through Ethernet. And a monitor program was developed for testing all the

peripherals of each system.

Project Title EMBEDDED WEB SERVER

Client CG-Coreel

Synopsis Project was to develop a static embedded web server, to test 'crater' microcontroller & FMAC. I have ported

a standalone TCP/IP on it & developed a web server application on it. This was done in embedded C language.

Project Title Noise reduction algorithm implemented in C, for pictures taken in low light images. Project Title Digital zoom implemented on images. And implemented box filter algorithm in C.

Project Title Worked on the decoder of H.264 video compression technology.

Project Title Developed a custom Bluetooth stack over ARM processor.