

Curriculum Vitae

Akash Agrawal

#485,29th Main ,9th cross BTM 2nd Stage

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TECHNICAL EXPERTISE:

- Expert in C , C++ programming.
- Very good knowledge of OOP concepts and Data Structure.
- Good knowledge in Linux Kernel internals and Linux OS Concept.
- Tools used: Seapine SCM, IBM Rational Doors, Eclipse, Multi 5(Green Hill software), Source Insight.
- Intermediate knowledge of Bash Scripting in Linux.

EXPERTISE SUMMARY:

- Knowledge of MFP (Multi Functional Printer).
- Knowledge of developing controls for HVAC systems.

EXPERIENCE SUMMARY:

- Having 7 years of professional experience in Software Industry.
- Involved in various phases of Product development like design, coding, and testing.
- Undergone 6 months extensive embedded training (PGDESD) at CDAC Bangalore.
- Good team building skills, grasping power and willingness to learn new technology.

EDUCATIONAL QUALIFICATION:

- Certificate of Diploma in Embedded Systems & Design from CDAC, Bangalore in August 2011 with 72% aggregate .
- B.E. in Electronics and communication (2006-2010) from MITS Ujjain affiliated to Rajiv Gandhi Technical University, Bhopal with 72.53% aggregate.
- Passed XII from M.P. board with an aggregate of 70.2% in 2005-06.
- Passed X from M.P. board with an aggregate of 75% in 2003-04.

PROFESSIONAL BACKGROUND:

- Currently working in Toshiba Software India Pvt. Ltd, Bangalore, in the MFP domain since February 2015.
- Previously worked Embedded Engineer in Ingersoll Rand India Ltd (R&D), Bangalore, in the Controls & Software domain since August 2011.

PROJECT EXPERIENCE:

MFP API Development

Development of Toshiba MFP(Printers) cross platform Applications (MFP APIs) using C++ and Python, sql ,to support multiple printer features. Development of MFP APIs using C++ and Python which internally called by Python (Pyramid Framework) to support Printer UI. Involved in unit testing of developed APIs, using python

Responsibility :

- Analysis of the specifications provided by the clients.
- Development of API for UI based Application for MFP
- Unit Testing using python script.

Language Used : C++, python .

ICON TRUCK TRAILER HMI DEVELOPMENT

The objective of this project was to develop a Human Machine Interface for a Truck/Trailer refrigeration units. These HMI display various temperatures , Discharge/return Air temperatures, set points, sensor values and configuration details, 1000 different Alarms, and logs. It communicates through CAN protocol to the controller AT91M55800A (AT91 ARM Thumb Microcontroller) and collects all the details necessary to display for the users.

Responsibility :

- Analysis of the specifications provided by the clients.
 - Design, Development and Maintenance.
 - Testing - unit testing & integration testing
 - Completion of development as proposed and promised to customers.
- Technology Used.

Language Used : C++.

Hardware Used : ARM9TDMI development Boards, HMI, PeakCAN USB tools, JTAG Debuggers.

LCU Controls

Description:

This project LCU- Light Commercial Unit to develop a human machine interface for the commercial ACs. There HMI display different parameter Return Air Temperature, Ambient Temperature ,Energy Meter and Different Alarm Notification ,Date-Time and Day schedulers.

Responsibility:

- Participate in POCs Done for project.
- Work on different Module at HAL and Application Layer.
- Develop **SPI,I2C,Serial Flash, EEPROM and RTC** Driver.
- Understanding and providing support for Control Algorithm and Designing Screen.
- Provide proper logging and error handling techniques.

Language Used: C

Hardware Used: 16 Bit Microcontroller (PIC24FJ256DA210) with Graphics controller.

SCCC: Small Commercial Converged Controller

Description:

SCCC project is based on the business idea of providing a single controller for supermarkets, retail stores and offices etc. where it will control, notify and keep record of different services like Fire Alarm Notification, Lighting Control, HVAC control, Access Control and monitoring energy consumption. This also has the functionality of notifying alarms to the client through SMS and Email.

Language Used: C/C++, Python under Linux Operating System. SQLite.

Hardware Used: Beagleboard xM ARM Cortex A8.

Responsibility:

- Development of Database Change Detector module.
- Implementation of Multithreading and Exception Handling for handling multiple concurrent requests.
- Design and implementation of Message Broker mechanism using System V message queue to handle IPC communication between different application modules.
- Implementation of proper logging for making the code maintainable.

PERSONAL PROFILE

Date of Birth : July 21, 1988
Gender : Male
Marital Status : Single
Passport : J5731460
Present Address : #485,29th Main ,9th cross BTM 2nd Stage Bangalore -560071
Permanent Address : C-2/27 Mahananda Nagar ,Dewas Road , Ujjain (M.P.)

Declaration

I hereby solemnly declare that all the information furnished above is true to the best of my knowledge.

(Akash Agrawal)

Place: Bangalore