Ananth Chandrasekharan

<u>ADDRESS</u>- c/o Parvathi Ramaswamy, B-105 Pinnacle Kalpataru, Behind I.D.B.I Bank, Ganesh Nagar Branch, Erandwane, Pune-411004

Email: ananthchandrasekharan@gmail.com

Cell: 09892980509



Career Objective:

To serve an organization where my skills and capabilities are put to best use for the benefit of the organization as well as my career.

Total Qualifying Experience: 3 years 13 months 26 days

Last Company: Capgemini Technologies Pvt Ltd.

Current CTC : 5.2 lpa

Notice Period: Immediate Joining

Current Working Domain:

TCP/IP, USB-HID, COM

Previous Working Domains:

Linux Device Driver, (1 years 6 months)

Linux Socket Programming and Multithreading, (2 years)

Embedded System (PIC MicroController) (1 year 9 month 11 days)

Win32 SDK (2 years)

COM (2 years)

WMI (6 months)

COM Callable Wrapper (CCW) (1 month)

Runtime Callable Wrapper (RCW) (1 month)

Explicit and Implicit Dynamic Link Library in Windows (2 years)

Shared Library in Linux (1 month)

| Educational |
|-----------------------|
| Qualification: |

| Degree/Course | College/ Institute | Board/University | Passing Year |
|---|--------------------------------|-----------------------|--------------|
| SSC | I.E.S's C.P.V School, Dombivli | Pune Divisional Board | March 2006 |
| HSC | Model College, Dombivli | Pune Divisional Board | Feb 2008 |
| B.E. (EXTC) | S.S.J.C.E.T, Asangaon | Mumbai University | May 2012 |
| Post Graduate Diploma in DIVESD | CDAC Center: | | |
| (Diploma in vlsi and embedded systems) Sunbeam Institute ,Pune | | CDAC | August 2015 |

| Other Technical Qualifications |
|--|
| Completed Full Diploma in Embedded Systems from APPIN LABS |
| Completed Full Diploma in JAVA from NIIT |
| Completed Course in Android Programming from Suven Consultants |
| Completed Course in C, C++ from APTECH Computer Education |

| IT Skills | |
|---------------------------|---|
| Technology & Languages | C,C++,Win32 SDK, COM, Socket programming in Linux,Multithreading in Linux and Windows,Network Device Driver in Linux and Windows,CCW,RCW, Explicit and Implicit Dll inWindows,WMI, Shared Library in Linux. |
| Software Devlopment Model | Agile |

| Embedded Skills | | | | |
|------------------------|---------------------------------------|--|--|--|
| Technology & Languages | C,C++,Embedded C,Linux Device Drivers | | | |
| Operating system | CentOS ,OpenSuse,Windows | | | |
| Microcontrollers | 8051,PIC,AVR | | | |
| MicroProcessors | ARM | | | |

Projects Undertaken-

B.E

Project Title : Wireless Power Transmission

Software : AVR Studio 4, Express PCB, WinAvr

Platform : Windows OS

Hardware : AVR Micro-controller

Role : Electronic Developer

• Writing code for application

Developing PCB Layout

• Prepare the entire Hardware

Projects Undertaken-CDAC

Project Title : Interfacing LCD with Parallel Port using linux device drivers

Software : Embedded C,C Programming

Platform : CentOS 6.0

Hardware : Desktop PC equipped with Female DB-25 connector, DB-25 cable, HD44780 LCD

Role : Developer

Responsibilities : Worked on of the application right from Requirement to Production

• Creation of Hardware

• Implementing open(),close(),write(),read() in device driver

• Implementing ioctl() in device driver for fixed display and scrolling display.

Projects Undertaken-Effortsys Technologies Pvt. Ltd

Project Title : Writing Setup Files for Windows products

Software : Automation in COM

Platform : Windows Server 2012

IDE : InstallShield

Role : Product Engineer

Responsibilities : Being the sole developer in Company regarding Windows Technologies , I am

responsible for all task; management assigns me for its windows products.

Project Title : Worked on Global Dispatch (Load Balancer in LINUX and WINDOWS)

Software : Multithreading and socket programming in LINUX

Platform : LINUX

IDE : vim

Role : Product Engineer

Responsibilities : Worked on maintenance and development of the product

Project Title : Worked on porting of NDIS 5.0 to NDIS 6.0 in Rxp.

Software : Widows and Linux Driver Programming

Platform : LINUX and WINDOWS

IDE : SourceInsight

Role : Product Engineer

Responsibilities : Worked on updation of Resonate Exchange Protocol driver in Windows.

Handling operations of driver on DataLink Layer (Layer 2)

Projects Undertaken-

Capgemini

Project Title: Servicing and Development of Software concerned with call control of headsets with softphones and vice-versa.

Software: Implementation of TCP/IP protocol via COM Programming and Sockets in Windows, Sockets in Linux, Cocoa in MAC along with understanding of USB-HID.

Platform: Windows, Mac, Linux

IDE: Qt,XCode,Visual Studio,vim

Role: Associate Consultant

Responsibilities: Development and servicing of software.

Description:

When we call from headset or from soft-phone, the software is responsible for communicating call from headset to soft-phone and vice-versa.

This project requires understanding of USB-HID implementation.

Multithreading is an essential part of Application.

The client for whom the software is developed can be revealed only with the consent of Capgemini Technologies Pvt Ltd.

Projects Undertaken- My

Initiative

1) Developed a standalone ComputerShop application in Win32

SDK.. This project was in line with contents of "primeabgb" site.

The code for the above project can be found at below link:-

"https://github.com/Ananth3990/ComputerShop-Project.git"

2) Creating COM

Framework Phase 1:

In this project, the main aim is to integrate all COM factory patterns namely

ClassFactory, Containment, Aggregation, Automation and ExeServer into a single Server. The server must be able to provide multiple functionalities to client Win32 application as per functionalities given in corresponding patterns respectively.

Initially to test this framework, Basic mathematical and trignometric fuctions is declared in corresponding factory patterns.

Self Registration is implemented in DLL_PROCESS_ATTACH and DLL_PROCESSDETACH. To

Simplify the statement above call of "regsvr32.exe NameOf Server" and

"regsvr32.exe -u Name of DLL" is given in CreateProcess() function inside DLL_PROCESS_ATTACH and DLL_PROCESSDETACH. respectively.

Thus there is no need of client to register Server separately.

Drawback of this method is that a client need to run executable application in administrator mode. This drawback is not removed since main aim is to create an hub like structure not like an installer as of now.

Improvement need to be done: Need to implement mutex to CreateProcess(), to ensure everytime Dll becomes part of address space of process, Registration is not done consequetively.

To access Source Code, do following steps:-

git clone

https://AstromedicompGurukul@bitbucket.org/AstromedicompGurukul/opengl ananth chandrasekharan.git

Inside this repository, refer COM Framework folder for code

How to Run the code?

Before Deploying the above code, Change the path of dll entered in all Dll Servers as "./" for current directory or any path you choose. I have kept it as

"C:\\Users\\anant\\Desktop\\COM_Modified_1\\Dlls" for now.Keep all the dlls in the path given by you.

Build DllServer code separately and place it in directory of Client Application.

Phase 2:

Incorporating CPU-Z application into the above framework.

I am using WMI and CPUID instructions to implement this.

COM Callable Wrapper and Runtime Callable Wrapper will be used if needed...

Win32 SDK's MDI (Multiple Device Interface) will be used for graphics).

Code is still under development. This project is currently kept on hold.

Project Title: Writing my Own Softphone

This project was undertaken by me to understand implementations of Softphone internally when working with Cappemini.

It was undertaken by me as a part of my own research.

Softphones application, I am developing is an TCP/IP layer application used for call control purposes.

Software: Writing a COM Client using Direct Show

Project Start Date: 07/11/2018

Estimated End Date: 30/11/2018

Platform: Windows

IDE: Visual Studio Community Edition 2017

Role: Developer

Team Size: 1

Description:

Application should detect Headset having audio and video capabilities. Able to initiate audio calls and provide call related functionalities.

Completion Details:

Application is able to detect Headsets having audio and video capabilities.

Used Monikers in this project to detect Headsets.

Currently I am working on call control functionalities

Github link will be available on 13th November 2018.

Work Experience

Worked as "Production Engineer for VFD Panels" – (Research and Development Department – Embedded Software) in Padmansha Technologies Pvt. Ltd. (CTC: 1.2 lpa) from 17/04/2014 to 28/01/2015 (0 years 9 months 11 days)

Working as Product Engineer in Effortsys Technologies Pvt. Ltd. (CTC: 4.2 lpa as on October 1st 2017) from 28/09/2015 to 13/04/2018 (2 years 6 months 18 days)

Working as Associate Consultant in Cappemini Technologies Pvt Ltd. (CTC: 5.2 lpa) from 17/05/2018 to 12/11/2018 (6 months)

Total Experience: 3 years 13 months 26 days

| Personal Information: | | |
|-----------------------|---|--|
| Name | Ananth Chandrasekharan | |
| Date Of Birth | 3 Sep 1990 | |
| Sex | Male | |
| Marital status | Single | |
| Languages | English, Hindi, Marathi, Tamil | |
| Nationality | Indian | |
| Strengths | Good leadership, Capable, Honest, Reliable, Flexible, Quick learner | |
| Hobbies | Yoga, OpenGL | |
| Passport | K4820194 [6/7/2012 – 5/7/2022] | |

Declaration:

I hereby declare that the information given above is correct to the best of my knowledge.

(Ananth Chandrasekharan)

Ananth