

## Avinash Jain

**OBH -314, IIIT-Hyderabad**  
Gachibowli  
Hyderabad 500032  
Andhra Pradesh  
**(+91)9502681447**  
**avinash.jain@ students.iiit.ac.in**  
jain.avi17@gmail.com

### Objective :

My interest is in learning new technologies in Computer Science and in Software Development

### Education :

<b>2009 – 2013</b>	: IIIT Hyderabad B.Tech Computer Science	Hyderabad, Andhra Pradesh
<b>2006 – 2008</b>	: Shree Jain Vidyalaya Higher Secondary Science	Kolkata, West Bengal
<b>1995 – 2006</b>	: Shree Digumber Jain Vidyalaya Primary & Secondary	Kolkata, West Bengal

### Coursework :

C Programming  
Data Structures  
Algorithm  
Formal Methods  
Operating system  
Computer System Organisation  
Digital Logic and Processing  
ITWS  
Introduction To Databases  
Graphics  
Computer Networks  
Digital Signal And Analysis  
Artificial Intelligence  
Principles Of Programming Language  
Distributed System  
Mobile Information Systems  
Database Management System  
Optimization Methods

### SGPA :

1st Semester	6.24/10
2nd Semester	6.52/10
3rd Semester	7.08/10
4th Semester	7.8/10

5th Semester	8.2/10
--------------	--------

**Work Experience :**

- Summer Internship In PlayCez as a web designer.  
<http://playcez.com/>
- Research Assistant at Cognitive Science Lab under Prof. Bipin.  
<http://faculty.iiit.ac.in/~bipin/>
- Research Assistant at EERC Lab under Prof. Neelima Sataym (still working)  
<http://www.iiit.ac.in/people/faculty/neelima>
- Research Assistant at CEH Lab under Prof. Navjyoti Singh (still working)  
<http://www.iiit.ac.in/people/faculty/navjyoti>
- Web-Designer of RoboCamp event.  
<http://web2py.iiit.ac.in/Robocamp>

**Achievements :**

- 6061 AIR in IIT-JEE 2009
- 1311 AIR in AIEEE 2009
- Rank 1 in Orissa JEE 2009
- Rank 48 in WBJEE-2009
- Talent Support Reward from Fiiitjee 2008
- class x topper in school 2006
- 1st prize in school race 2002
- Best Boy Reward 2000

**Skills :**

<b>Programming Languages :</b>	C, C++, JAVA, Matlab , Ruby, Scheme
<b>Scripting Language :</b>	Python ,
<b>Operating System :</b>	GNU/Linux, WindowsXP/Vista, Windows 7
<b>Web Technologies :</b>	HTML, XHTML, CSS CSS3, JavaScript JQuery, AJAX
<b>Server Side Scripting :</b>	PHP , JSP
<b>Database Management System :</b>	MySql , Sqlite 3
<b>Graphics Platform :</b>	OpenGL
<b>Gaming Platform :</b>	Pygame
<b>Development Tools :</b>	web2py, Glade , WordPress
<b>Mobile Development :</b>	Andriod

<b>Flash :</b>	Action Script 3.0
<b>Photoshop :</b>	Adobe Photoshop CS5 (very little)
<b>Other Languages :</b>	Octave
<b>IDE :</b>	Eclipse, NetBeans

**Projects :**

**Major Project:--**

**Proxy Server:** Mini proxy cahche server for caching as part of Networking project. Project was done in **java**. In this project a client has to insert some url and my program parsed that url according to **HTTP** protocol. Then it searches on cache whether we have the reponse or not. If not then program will try to fetch resources from interent. After getting resources it send response to client and save one copy of it to its cache for a untill its expiry date.

**Money Transfer App:** This project was basically based on data transfer security where i used **PGP(Pretty Good Privacy) 2048 assymetric encryption** to transfer data from cleint to server.This application was build on Android. In this user is able to transfer his money from his account to others account giving his and others account number and the amont he/she wants to transfer as input. For **SQLite3** was used for database management in this project.

**ABCD Watermelon:** This is a game. For development of this game i used **python** as programming language and **pygame** as platform. Alog with that i made three more games using the same technology.

**3D Rail:** This was my Graphics project. In this project we used **OpenGL** cross-platform API and **C++** as programming language. In this project i provide features of acceleration/retardation. One can change view my moving camera in all possible direction etc. Along with that i made a Carrom game and objects with changing textures.

**IblotPass:** This is a one time password web app. In this web app the password of a user chages randomly every time he login into the system. In this project during registration we show 10 different images to user. The user has to relate those images to something he/she is familiar with and accordingly he/she has to provide two charachter association for each iamge. At the time of login user has to insert those association to successfully login. This app was made with the help **HTML, XHTML, CSS, XML , JavaScript, Jquery, PHP & Sqlite3**. You can try this web at <http://web.iiit.ac.in/~avinash.jain/iblotlogin/login.php>

**Courses Portal:** This project was done as part of Mobile Information System course. This project was done on **Android**. In this project a student has to register for a course he/she wants to take. User can add/drop courses, update his profile etc. User can view his/her academics records course wise, semester wise etc. Similar to this i build a portal on web in along with the above features login system was provided to upload assignments. precautions were taken to differentiate assignment of students.You may want to take a tour of this app at <http://web.iiit.ac.in/~avinash.jain/cps/>

**Mini Projects:--**

**Assembly Language:** Implemented some basic algorithms (like N - Queens problem) in ARM Assembly. matrix multiplication assembly language code using ARM architecture in CSO.

**DBMS Projects:** Course project which include implementation of various basic and advance algortihm uses to optimize database performance . During this course i implemented Multi-way merge sorting, Sort-Merge Join, Hash Join, Hash and B- tree for duplicate elimination and a program to execute basic select queries of **SQL**.

**Restaurant Finder:** This app was build on **Android**. In this app user has to give the type of food he/she like to eat and the location where he/she wants to find a restaurant. Then i used **geolocation api** to find the latitude and longitude of the relevent places and on the basis of that i provide a list of addresses of restaurant to the user.

**Graphics API design:** Developed an **OpenGL** like graphics API having complete Graphics pipeline functions from modelling, viewing to viewport clipping.

**Interpreter Design:** Designed an interpreter for some features of **BASIC** language in **C** .

**Linux Shell:** Implemented a Linux shell for running all types of commands (that supports piping and redirection) in **C/C++** using family of system calls

**Music Library:** Music Library and a 3-tier web application based on a **NGO** : using **Web2py** which is a web application development tool using **python** , **html** and **mysql** for databases . In this project i provided functionality of login system. User can sign-up. A registered user is allowed to upload/download songs. User can view the list of all the songs uploaded by other users. User can search on the basis of some song name to find relevent songs.

**Stock Management of a Shop:** I build a web app for stock management of a local shop in which the owner can see his/her annual profit/loss, stock level in his/her shop, sells etc. The app was build in **python** using **web2py** platform. For database i used **mysql**.

**Image Gallery:** This app was build for uploading and viewing images. I used **HTML**, **CSS3**, **JavaScript**, **Jquery**, **PHP**, **Sqlite3** for the development of this web app. A registered user is allowed to create, update and delete his albums.

**Calculator:** I build a calculator using **glade interface designer** and **python**.

**Digital Singnal Processing:** Used sapmles of sound file to extract basic information and edited sound file to create noise.

**Image Processing:** Gray Scaling of coloured images and turn them into balck & white using **OpenCV** library and **C++** as programming language.

**Video Creation:** I took 3-4 images and merge them to create a sharp video in **matlab**.

**Interests:**

- Programming
- Artificial Intellegence
- Database Management
- Computer Networks
- Graphics
- Image Proccessing
- Game Development
- Android Development
- Web Development

**Extra Curricular:**

1. 2012- present: Serving food to children from slum areas under Asha Kiran,
2. I like to read about new technology and explore usage of computer science across various disciplines.

**B.T.P :** Spam filtering under Prof. Shatrunjay, Rawat  
<http://www.iiit.ac.in/people/faculty/shatrunjay.rawat>

**Declaration:**

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