# **Charchit Gupta**

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## Cover

Hi, since my initial college days I've been interested in 3D-animations and 3D modelling stuff. I did some cool animation and software projects back then out of curiosity and passion. I've worked on Blender, the open source 3D graphics and animation software and learnt some basic stuff in the domain. As I see that 3D PLM works on development of some of the world's best known 3D apps, I believe this would be the perfect opportunity to showcase my skills, to learn and to build cool applications.

# **Experience and Achievements**

- Currently working as Application Developer in Tata Consultancy Services.
- Developed Crime Analysis Software Application for Madhya Pradesh Police Department.
- Stood 12<sup>th</sup> in National level coding contest 'Amdocs Code Mania 2013'.
- Microsoft Student Partner for the year 2013-14, volunteered in DevApp, event organized by Microsoft.
- Interned at Pragmatum Pvt. Ltd., New Delhi.
- Attended the **MSP Boot camp** by Microsoft at Lonavala.

# **Education**

•	2014 – B.E. (Computer Science) – RGTU		[63%]
•	2010 – 12th (Sr. Secondary)	<ul><li>– CBSE Board</li></ul>	[70%]
•	2008 – 10th (Secondary)	<ul><li>– CBSE Board</li></ul>	[75.8%]

#### **Relevant Projects**

- **Win8 app:** A 2-D game App, in which user has to hit the bulls-eye with an arrow. Arrow simulates the projectile motion making the goal difficult to achieve. Implemented collision detection in the gameapp using JavaScript, was fully touch interactive.
- **Rotation3D**: A self-project, user can create multiple 3D cubes using mouse drag, rotate the cubes in place selectively. Change their dimensions. Application used Graphics.h library in C++
- **2D-Physics Engine**: A self-project where I tried to simulate a 2D-physics engine. User could create 2D-bubbles with a mouse click. These bubbles then collide with each other and bounce back in opposite directions. used Graphics.h library in C++
- **CPU Job Scheduling Simulator:** Graphical simulator for various CPU scheduling algorithms, custom CPU speeds, multiple view modes such as FCFS, Round Robin and SRTF etc. Used C++ Graphics
- Squash-3D: A C++ program that simulates Squash (sport) in 3D. Ball comes (appears to come) towards the screen and player has to put his racket in the path of the ball. The ball will bounce back and rebounds from the wall in front. The game continues hence forth. Tried to implement Collision detection techniques. Graphics.h C++
- **CGr8**: Tried out Blender's 3D game engine on a Car Mesh. Wrote some python scripts to change the coordinates and rotation states of the car in response to user key stroke events. With game-engine's internal shaders and specular lighting, it looked almost real.

# **More Projects**

- Managed Accounts List: A web application that works under close integration with Microsoft's CRM,
   Microsoft Sales Management and Microsoft's Data Operations System. The application is responsible
   for managing Microsoft's huge sales and accounting data to keep it in sync. Allowing users to
   perform various update tasks on this data while keeping the data in sync with external systems.
   My contribution:
  - Implemented multithreaded search for querying multiple servers at once. This enabled the search operation that took  $^{\circ}60-70$  seconds to be completed in < 15 seconds.
    - .NET/ C#
    - MSSQL
  - Developed MAL Discrepancy Analyser: A tool that compares data for given coma separated accounts and shows discrepancies in any of the data fields and generate Excel report for the same. Saving hours of manual efforts of my team.
    - JAVA
    - MSSQL
- Crime Analysis Software for CID [Web Application]: (<a href="http://cid.mppolice.gov.in/crime analysis">http://cid.mppolice.gov.in/crime analysis</a>)

  Developed and deployed an online system to categorize FIR of various crimes lodged all over the province to generate reports, graphs and statistical data. This project is being used by Madhya Pradesh Police Department. 3.5 lac FIRs had been lodged till date. Technologies used:
  - o JQuery, JavaScript, AJAX
  - o PHP, MySQL
  - Google Charts API
  - SSH and SFTP
- Rang Dey Zindagi [Website]: developed the website for "Rang Dey Zindagi" (<a href="http://rdz.org.in">http://rdz.org.in</a>) a local NGO that works for less privileged students. Volunteered and tried to support the cause by providing it a means to enhance its reach.
- Movie-On-Moods [Web Application]: Application takes a movie title and finds out the suitable Poster, Description, lowest priced DVD and Amazon Instant Video for that movie by searching from Amazon and Rotten Tomatoes. Front end used SVG graphics dynamically generated by JavaScript to display hexagonal links. Technology used...
  - o J2EE / Hibernate
  - Amazon's PAAPI (Product Advertisement API)
  - o Amazon's EC2 service
  - JavaScript / AJAX

# **Academic Projects**

- Campus-Surveillance: (<a href="https://github.com/seijee/campusSurveillance">https://github.com/seijee/campusSurveillance</a>), an online system that helps in administration of the Educational Institute by providing integrity among various departments such as Library, Accounts, Academics and Cultural department. The system provided a platform where user could create an online community from a subset of users he is already connected with. System also allowed authorized users to bulk upload new records (Student details) via excel sheet. Application had fully responsive design and could be used screens of any size. Used...
  - o J2EE / Hibernate
  - o HTML, JS, AJAX
  - o MySQL

- Online Picture Manager: user could upload images share them with others, view images shared to him. Submitted as minor project in college, developed an API for client side image compression by JavaScript. Application also had polling based chat feature. Technologies used...
  - o PHP, MySQL
  - o JQuery, AJAX
- **College tech-fest:** developed the website for tech-fest (Moonstone).

## **Skills**

- OOP
- Data Structures
- Algorithms
- HTML5, CSS3, JavaScript, jQuery, AJAX, AngularJS, MySQL
- C++, PHP, JAVA, J2EE, JSP, Servelets, Hibernate, Spring
- Quick Learner of Programming language

#### Links:

- Interactive Resume (Recommended): <a href="http://seijee.github.io">http://seijee.github.io</a>
- LinkedIn Profile: <a href="http://in.linkedin.com/in/charchitgupta">http://in.linkedin.com/in/charchitgupta</a>
- GitHub Profile: <a href="https://github.com/seijee">https://github.com/seijee</a>