# RAHUL SRIVASTAVA

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Academic Qualifications			
Examination	Year	Board/University	%/CGPA
Dual Degree(Hons.),Computer Science & Engineering	2011	IIT Kharagpur	8.18/10
Class XII	2003	CBSE	88%
Class X	2001	CBSE	84%

### **Academic Distinctions**

- All India Rank 482 in IIT-JEE examination among 300,000 candidates, 2006
- State Rank 55 in UPSEAT (Uttar Pradesh State Engineering Admission Test) among 80,000 candidates, 2006
- All India Rank 1078(with 98.99 percentile) in GATE examination among 107,086 candidates, 2010.
- 9.75/10 GPA in 8<sup>th</sup> semester (10/10 in Project, 10/10 in 4 Courses) at IIT Kharagpur, 2010
- Recipient of **GATE MHRD scholarship** given by Gov. of India, May 2010 to April 2011
- Offered scholarship for summer internship at Universidad de Guanajuato in Mexico, 2010

# **Work Experience/ Internship**

Laboratory of Vision, Robotics and Artificial Intelligence, UGTO, Mexico

(20<sup>th</sup> May- 20<sup>th</sup> July,2010)

**Project Name:** Reducing Complexity of 3D Mesh

**Area**: Computer Graphics

- 3D objects are represented as a set of polygons, PLY files represents this set as a text file.
- Aim was to reduce the number of polygons representing the 3D object, keeping visual similarity intact.
- Software made (in C++ using OpenGL) to parse the PLY file and display its content.
- An innovative approach for polygon reduction using curvature estimate proposed.
- New approach successfully implemented &15-20 % reduction in number of polygons achieved.

# Tata Research Development & Design Center (TRDDC), Pune

 $(10^{th} May - 10^{th} July, 2009)$ 

**Project Name:** Quest 2009 (Web Application)

Area: Databases(MDX & OLAP), GUI

- Aim was to create a survey analysis tool in the form of a web interface for cube data structure.
- MDX (Multi Dimensional Expression) queries were mapped to an intuitive 2D GUI.
- Website successfully made displaying MDX queries in the form of tables and charts.
- 3000 lines of code written in C# & ASP.NET. Visual Studio 2005 and SQL Server 2005 were used.
- Highest Grade 10/10 in summer internship evaluation at TRDDC and IIT Kharagpur, 2009

#### **Projects**

# Design Lab, IIT Kharagpur

 $(20^{th} July - 20^{th} November, 2010)$ 

**Project Name:** Creating 3D photographs and videos

- Easy way of creating analyph 3D photos and videos suggested using normal 2D camera.
- Program written which took as input two images of the same object from slightly different perspectives.
- Output was a 3D anaglyph image. Similar technique used to produce 3D anaglyph video.
- Program written in C++ using an open source library ImageMagick.

### B.Tech. Project, IIT Kharagpur

(August 2009 – April 2010)

**Area:** 3D Technology

Project Name: Estimating curvature of digital curves

**Area:** Computational Geometry, Graphics

- An innovative approach using digital osculating circle proposed for curvature estimation of digital curves...
- Idea was to approximate a part of the digital curve with best fitting osculating circle
- The new algorithm was implemented in Java using NetBeans6.5
- It produced improved result than all other known methods and used only integer calculations

# **Positions of Responsibility**

- Teaching Assistant for Computer Organization and Architecture Lab, CSE, 20<sup>th</sup> July 30<sup>th</sup> November 2010
- Member of sponsorship team of BitWise 2010, annual programming contest organized by CSE, IIT Kharagpur

### **Extra Curricular Activities**

- National Cadet Corpse (NCC) of Indian Army, Annual Training Camp: completed successfully, 2006.
- Participant of Inter Hall English Dramatics competition, 2008.
- Involved in teaching 70 students of Kendriya Vidyalaya, IIT KGP as a part of National Services Scheme(NSS)
- Volunteer, MANZAR annual literary fest of IIT Kharagpur.