# Vikash Chandra Sharma (06SI2005)

Address: D-310, RP Hall of Residence, IIT Kharagpur, WB-721302

**Phone**: 91-9732932675, **E-mail**: <u>vik.iitkgp@gmail.com</u>, **DOB**: 11<sup>th</sup> June, 1985

Examination	Year	Board/University	%/CGPA
5 yr. Int. M.Sc. (Statistics and Informatics)	2006-2011	IIT Kharagpur	7.74/10
Class XII	2003	Army Public School, ND (CBSE)	<b>88%</b> (Math: 85, Physics: 90, Comp: 89)
Class X	2001	St. Xavier's School, Sahibganj (ICSE)	<b>89.8%</b> (Math: 99, Science: 90)

### **ACADEMIC DISTINCTIONS**

# Competitive **Examinations**

- Was placed among top 0.9% of the candidates (around 3 lakh) who appeared for IIT-JEE in 2006.
- Was among top 2% of the candidates (more than 450,000) appearing for All India Engineering Entrance Examination (AIEEE), 2006.

# Scholastic **Achievements**

- Has been receiving Merit-cum-Means Scholarship for the past 4 years at IIT Kharagpur.
- Was awarded a **Letter of Appreciation** by the Director of Army Public School, New Delhi for outstanding scholastic performance in 2003.
- 1st in Mathematics in Class X Board Exams out of 120 students of St. Xavier's School, Sahibganj.

## **PROJECTS**

#### **Summer Project** Guide: Prof. Chandan Chakraborty, School of Medical Science and Technology IIT Kharagpur

# **Project details**

Time Series Modelling of the RR Interval extracted from the ECG data of a congestive heart failure patient and its comparison with the RR Interval of a Normal Heart patient using Mat Lab.

( May 2010 - July 2010)

Project aims at easier understanding of ECG data and better diagnosis of patients by the prediction of Heart- rate variability.

### Research

- Successfully completed the project and built a Time Series model with least Energy. (Autoregressive model of order 3)
- Comparison showed that patient suffering from Congestive Heart Failure patient's data followed the same model as that of a normal patient but of higher order.

### **On-Semester Project**

#### Guide: Prof. N. Chakraborti, Metallurgy and Materials Engineering IIT Kharagpur (Autumn-2008)

# **Project Details**

- Family Budget Optimizing Algorithm implemented in C using the real coded Genetic algorithm utilizing the greedy technique and constraint handling capabilities
- Project aims at Optimizing the utility of any product in the list of monthly budget of a family under the given income constraint.
- There was variation from the optimal value of total utility from the results obtained from MATLAB by 6-8%.

### Research

It is, however, capable of optimizing all integers, discrete and continuous variables and capable of handling non-linear objective functions with multiple non-trivial constraints.

Other Short term Projects				
Project Details	<ul> <li>Advanced Programming for the implementation of Algorithms like Dijkstra, Prim, Ford Fulkerson, Binary Search tree and B tree under the guidance of Prof. D.K Gupta and Associate Prof. P.V.S.N. Murthy</li> </ul>			
SHORT TERM COURSES				
Seminars	<ul> <li>Completed a workshop on SAS conducted by the IVY Professional School at IIT Kharagpur and was awarded Certificate of Completion (Jan 16, 2010).</li> <li>Attended a day workshop conducted by the Entrepreneur Cell, IIT Kharagpur on Web designing tools (Web-2.0).</li> </ul>			
Courses	<ul> <li>Done courses on Econometric Analysis, Regression Analysis and Financial Engineering</li> <li>Completed a course on Multi-Objective Optimization using Genetic Algorithm</li> </ul>			
SOFTWARE SKILLS				
Operating System	Windows, Linux			
Programming	• C, C++, HTML			
Simulation Tools	• SAS, R, MATLAB, AutoCAD			
MS Office	Excel , Word, PowerPoint			
Others	• Photoshop			
POSITION OF RESPONSIBILITY				
School	<ul> <li>Head of the Dramatics Team and won the best play award for the play- "Merchant of Venice-(ACT V)", '01(Role: I was to guide a group of students during the rehearsing of the play and help them come out with an outstanding performance)</li> <li>Head of the Study Circle Group'01(Class was divided into various groups and each group was assigned a head. It was the head's duty to take care of the problems of group members regarding their studies and guide them)</li> </ul>			
	<ul> <li>Prefect in Class XI and Class XII'03(Maintain class discipline and coordination)</li> </ul>			
EXTRA CURRICULAR ACHIEVEMENTS				
IIT Kharagpur	<ul> <li>Worked as a volunteer in the Decoration Team of the Techno-management fest Kshitij'06 held at IIT Kharagpur.</li> <li>Worked in the Decoration Team of Illumination of R.P.Hall'07 and won a gold medal.</li> <li>Won a 1st prize in QUIZZARDS of OZ (COMPOSIT-2009) at IIT Kharagpur.</li> <li>I have attended the NCC camp (2006) and was under NCC 1-Bengal EME Coy for one year</li> </ul>			
School	<ul> <li>Won a 2<sup>nd</sup> prize in my district for Painting and Poster making competition</li> <li>Won a 1<sup>st</sup> prize in Inter-House Quiz competition in my school'01</li> <li>Represented Army Public School for Inter-School table tennis tournament'03</li> </ul>			