Guchu Nathani

Education:			
Dual Degree (Electrical Engineering)	IIT Kharagpur	CGPA: 7.02 / 10	2006-2011
XII	Modi Public School (CBSE)	Percentage: 73%	2004
X	Shanti Niketan (CBSE)	Percentage: 80%	2002

Internships:

Smart Grids Project:

Hochschule Darmstadt, Germany

May-July 09, May-July 10

- Developed a fuzzy logic based 'Decision Assistant' to help in inflow/outflow of electrical power from various sources in case of energy deficit/excess in the corporate sponsored smart grid project for **HEAG Südhessische Energie AG (HSE)**.
- Developed an ANN based load forecast system for different time resolutions which improves planning & preparedness.
- Was **invited for 2 years in a row** owing to successful completion of my part and dedication to the project.

Larsen & Toubro India Limited

Vadodara, India

June-July08

Did analytical research for the company in relation to the market status of Ready Mix Cement Concrete industry.

Courses and Certifications in Finance:

- NCFM Certified Dealer in Investment Analysis & Portfolio Management, Options Trading strategies, Derivatives Market (Dealers) & Currency Derivatives (Beginners) modules.
- Industrial Economics
- Financial Engineering
- Probability and Stochastic

Key Academic Projects:

Simulation and Design of a 3φ Rectifier for wind power Generators: (M.Tech Project)

IIT Kharagpur

- Combination of a three-phase diode bridge and a dc/dc boost converter to develop a new 3ϕ three switch three level pulse width modulated rectifier system.
- Simulating the circuit in the current phase, a hardware implementation to be used with variable voltage/frequency sources being developed in the department is to be done in the next phase.

Modeling of fuel Cells: (B.Tech Project)

IIT Kharagpur

- Modeled and simulated fuel cells using Simulink in order to study the variation of output voltage with temperature and simulation of circuitry for converting the output into 3ϕ AC.
- Was appreciated for comprehensive topic coverage and was awarded 'A' grade.

Prediction of currency crisis using hybrid Neuro-fuzzy modeling: (term project)

IIT Kharagpur

• Developed a Neuro-fuzzy based forecast system for currency crisis based on factors like economic reserves, M2/reserves ratio, exports and exchange rate.

Working of the Indian Energy Exchange: (term project)

IIT Kharagpur

Prepared and presented a term paper to study the process and strategies of energy trading in the Energy Exchange.

Positions of Responsibility:

Hall President: (09 -10)

Patel Hall, IIT Kharagpur

- Was solely responsible for the smooth functioning of the hall comprising of more than 450 boarders.
- Planned and executed changes like renovation of online mess system, systematic monitoring of cleaning contractor and sports/social-cultural infrastructure improvement.
- Proposed a total budget of nearly R500,000 from which I directly planned an expenditure of R200,000.
- Helped, in presenting a very successful Illumination, in achieving **1**st **position** in the Sports General Championship and in achieving a **2**nd **position** in the Social & Cultural General Championship.

Member, Student's Senate & Student's Forum (09 -10)

Gymkhana, IIT Kharagpur

Represented my hall as a member in the two topmost student bodies of IIT Kharagpur.

Captain, Dramatics: (10 - 11)

Patel Hall, IIT Kharagpur

• Having acted and directed in many interhall and intercollege dramatics events was nominated as the captain for interhall dramatics in the Social and Cultural General Championship.

Secretary, Dramatics Subcommittee: (07 - 08)

Patel Hall, IIT Kharagpur

- Took care of the financial and material acquisition aspect of the events with a budget of around R30,000.
- Having done my work sincerely I was presented with the 'Best Hall Work' award.

Extra Curricular Activities:

- **Director & protagonist**: **Silver** winning Play (Inter-college), **Director**: street play on aids-awareness for workers and truck drivers at the local dealership of Tata Motors.
- Finalist of national level ad-design competition, Marca-De-Fabrica, in Kshitij'07.
- **Gold**: Inter Hall Eastern Groups (07), Inter Hall Choreography (08); **Silver**: Inter Hall Hindi Dramatics (08) **Bronze**: Inter Hall English Dramatics (07).
- Hobby: Hindi poetry writing.