

# ARNAB BHATTACHARJEE

MALE, DOB-20/09/1987

#### **EDUCATIONAL PROFILE**

| DEGREE   | UNIVERSITY/BOARD                                     | YEAR      | MARKS   |
|--|--|-----------|---------|
| 5yrs B.Tech+M.Tech Dual Degree in Mechanical Engineering | Indian Institute of Technology,<br>Kharagpur         | 2006-2011 | 8.09/10 |
| Class XII : Higher secondary examination                 | West Bengal Council of Higher<br>Secondary Education | 2006      | 91.2%   |
| Class X : Secondary examination                          | West Bengal Board of Secondary<br>Education          | 2004      | 93.4%   |

## **ACADEMIC HONORS & ACHIEVEMENTS**

- All India Rank of 1542 out of 2,00,000 students that appeared for IIT Joint Entrance Examination 2006.
- All India Rank 3 out of 75,000 students that appeared for West Bengal Joint Entrance Examination Test 2006.
- State Rank of 46 in All India Engineering Entrance Examination in 2006.
- Topper of my school in class X (Julien Day School) board exams n 2004 and ranked 26<sup>th</sup> in the state of West Bengal.
- Secured an All India percentile of 99.54 in GATE 2010 in mechanical engineering.
- Secured a Grade A in Achievement cum Diagnostic Test in mathematics in 2005 organized by Centre For Pedagogical Studies In Mathematics.
- Participated in the prestigious GE Edison Challenge 2009 finals held in Bangalore. Our team was one of the 18 teams selected out of 90 teams. There our team presented solution for producing green energy suitable for rural areas and were highly appreciated by the judges.

# **INDUSTRIAL INTERNSHIP**

BHARAT DYNAMICS LIMTED, Hyderabad, India

5<sup>th</sup> May – 30<sup>th</sup> June 2009

Project Title: Automation of Capacity Planning, Component Scheduling, Routing, Machine Loading and Prioritization.

**Achievement**: My work constituted the basic modules for entire ERP software which the company was planning to implement to ensure production efficiency and efficient allocation of resources.

#### PROJECTS UNDERTAKEN

UNIVERSITY OF MASSACHUSETTS, DARTMOUTH, USA

25<sup>th</sup> May-27<sup>th</sup> July 2010

Project Title: Simulation of four-point probe method being applied to CNT reinforced polymer composites using ANSYS and matching with experimental results.

Project Guide: Dr. Vijay Chalivendra.

**Achievement:** My work was consistent with the experimental results and it created the basic framework for simulation of more complex geometries using the methodology I developed.

IIT KHARAGPUR , INDIA B.Tech Thesis

Project Title: Multi-objective genetic Optimization of the heat transfer and fluid flow in sinusoidal wavy channels.

Project Guide: Dr. P.K.Das

Work Done: I used FLUENT to simulate the fluid flow and heat transfer and a genetic algorithm was used to maximize heat transfer and minimize pressure drop using the results form the FLUENT simulation.

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IIT KHARAGPUR, INDIA

M.Tech Thesis , Ongoing

Project Title: Numerical simulation of formation of arterial stenosis and investigation of flow fields in partially stenosed artery

Project Guide: Dr.P.K.Das

Work in Progress: Currently developing C-codes for simulation of flow fields in stenosed artery using SIMPLE algorithms.

Multi-objective optimization of deflection and mass in a parabolically loaded cantilever beam using NSGA-II, IIT Kharagpur Work Done: Successfully implemented a Multi-objective GA code in MATLAB for solving the problem.

## **CERTIFICATIONS**

- Received certificates from National Stock Exchange for clearing four NCFM modules namely Financial Markets: A
  Beginners' module, Mutual Funds: A beginners' module, Capital Markets (Dealers) module, Derivatives Markets (Dealers)
  module
- Received a certificate of completion for the successful completion of all the modules of SAS 9.1 overview workshop conducted bye IVY professional school.

#### POSITIONS OF RESPONSIBILITY

| Post, Event   | Year      | Achievement  |
|---|-----------|--|
| Organizing Team Member,<br>MASTI (Social event in<br>M.S.Hall)    | 2008      | <ul> <li>It was the first time in IIT Kharagpur that such an event was held by M.S.Hall .</li> <li>Worked in conceptualizing various innovative events and organizing and coordinating them successfully.</li> </ul>   |
| Member, Cheminnovation<br>(an Inter-Hall Technical<br>event)      | 2009-2010 | <ul> <li>Was part of the first ever team from M.S.Hall in 2009 that participated in the event .</li> <li>Our team won Gold medal in the competition in 2009.</li> </ul>  |
| Integrator, HVAC team of<br>energy audit of IIT<br>Kharagpur      | 2010      | <ul> <li>Conducted and coordinated the first ever Energy Audit of IIT Kharagpur.</li> <li>Was the team leader of HVAC group of the audit and suggested various measures that would cut down electricity consumption costs worth around 2million Indian rupees annually.</li> </ul> |
| Currently working as an<br>Consulting Analyst at<br>Canopus India | 2010      | Currently leading a team of Analysts from IIT Kharagpur in developing simulation platforms for waste water treatment facilities.   |

#### **EXTRA-CURRICULAR ACTIVITIES**

- Was part of the Inter-Hall (Meghnad Saha) Dramatics (Bengali) team in 2009.
- Was part of National Cadet Corps in my first year in university and part of National Service Scheme in my second year in IIT Kharagpur.
- Secured first division with distinction in practical in drawing and painting in the 4<sup>th</sup> year stage of the Annual Examination in the year 1997-98 organized by the Sarba Bharatiya Sangeet-O-Sanskriti Parishad.
- Was part of the sponsor's team of our annual event 'Hall Day' in our hall of residence.