Name : Debajyoti Nandy**.**   **Roll No.** 100100073**.**

Dept: Mechanical Engg, 4th Year,B.Tech**.**   **CPI :** 9.11

ACADEMIC AWARDS AND ACHIEVEMENTS

- Currently in my 7th semester and having a CPI of 9.11, among the top 15 out of 140 students of mechanical engineering department.
- Secured AIR328 in IITJEE 2010 out of 3.58 lac applicants (99.9 percentile) and AIR 586 in AIEEE 2010 out of 10.65 lac applicants (99.94 percentile)
- Was among the top 30 out of the selected 3000 candidates (from all regions) at the **Indian National Mathematics Olympiad 2010,** conducted by the HBCSE.
- Ranked 1st in **Regional Mathematic Olympiad-2010** and 8th in **Regional Mathematics Olympiad-2009** in Tripura region conducted by HBCSE.
- Was among the top 300 selected for **Indian Chemistry Olympiad** among 40,000 applicants of **National Standard Examination in Chemistry-2009** conducted by Indian Association of Chemistry Teachers in collaboration with HBCSE.
- Secured national **Top 1%** at the **National Standard Examination in Physics-2009** conducted by Indian Association of Physics Teachers in collaboration with HBCSE.
- Was among the **Top 100** qualified students for junior "**JBNSTS-DoNER**" Scholarship-2008 by **Jagadis Bose National Science Talent Search,** Kolkata.
- Secured 100% score in Mathematics in 10th board examination and highest score (95%) in Mathematics in Higher Secondary (+2) examination.

IMPORTANT COURSES COMPLETED & PURSUING

- **Mathematics** :Probability and Random Processes, Linear Algebra, Multivariable Calculus, Data Analysis and Interpretation, Numerical Analysis, Number Theory, Optimization, Mathematical Methods in Engineering.
- **Computer Science Courses**: Computer Programming and Utilization, Design and Analysis of Algorithms, Foundations of Machine Learning, Discrete Event System Simulation.
- **Electrical Engineering Courses**: Digital Electronics, Electrical and Electronic Circuits, Microprocessors and Automatic Control.
- **Departmental Courses**: Industrial Engineering and Operations Research, Computational Fluid Dynamics and Heat Transfer.
- **Management Courses**: Marketing Management, Accounting and Finance

INTERNSHIPS AND ACADEMIC PROJECTS

Mathematical Model for Hydraulic Jets in Dishwasher Spray-Arms   (May'13-June'13)

Guide: Mr. Nukul Sugandhi, Senior Global Engineer, Whirlpool India Ltd., Pune

- Mathematically modelled the hydraulic jet coming out of a rotating spray-arms used inside a dishwasher to find the impact forces, vibrations and other needful properties.
- Implemented the completed model which included modelling of two spray-arms kept vertically each having twelve nozzles placed along the horizontal length in **Simulink** and simulated the results.
- Used a discrete modelling approach to find the trajectory of the water jet and modelled the relation between applied pressure and the washing efficiency.
- Though being simpler than CFD simulations, the accuracy was near to the CFD results.
- Presented the project to American and European senior engineers which they will use as parent model to other successor models. My project was awarded for being chosen as **one of the best five** projects out of the other fifteen projects being run in summer.

POSITIONS OF RESPONSIBILITY

Warden Nominee, Hostel-08   (May'13 till present)

- Working with General Secretary, Hostel-08 in management of the council, allocated hostel budget and other projects undertaken by hostel.
- Co-ordinate with the Warden to improve the hostel facilities for its inmates.
- Conduct monthly council meeting with every councillor and secretary to take regular updates about hostel activities and continuation of on-going projects.

Technical Councillor, Hostel-08   (May'12 –April'13)

- Co-ordinated with the Technical Secretary to maintain the **Tech-Group** in hostel to continue the involvement of inmates in technical activities.
- Provided all necessary equipment and software needed for technical activities in the hostel
- Organized intra hostel workshops on "Uses of LaTeX Software" and "Necessity of MatLab". Organized an intra-Logic Competition in the hostel to practice for the STAB-Logic GC.
- Made the best possible teams from the hostel to participate in tech-general championships and stood **overall 1st position** among 13 hostels in the institute.
- Was awarded "**Hostel Organizational Colour,12-13**" for rendering exceptional services towards the hostel as technical councillor, achieving outstanding results for the hostel.

EXTRA-CURRICULAR ACTIVITIES

- Completed one year of training in the "**2 Maharashtra Engineering Regiment NCC**" and obtained NCC 'B' certificate after qualifying the necessary examination.
- Secured 3rd place in the "**Microcontroller Reversing Competition**" conducted by Electronic Club, IIT Bombay.
- Secured 2nd place in a Work Experience Camp in the **Eastern India Science Fair** 2009 held at **Birla Institute and Technological Museum**, Kolkata.
- Won **Brainvita** online quiz competition (individual event) conducted by **Radiance 2011,** the annual festival of Mechanical Engineering Department IIT Bombay.
- Participated in **RC Car building competition** for freshmen in 2010-11

COMPUTER LANGUAGES AND SOFTWARE PACKAGES

- **Programming Languages:** C++, Basics of JAVA, Basics of Python
- **Software Packages:** Matlab, Simulink, Scilab, EAGLE, LaTeX.
- **OS:** Windows 98/XP/Vista/7/8, Linux

DECLARATION

I, Debajyoti Nandy, hereby declare that the above information is correct to the best of my knowledge.