

Mohit Prateek

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Examination	Institute	Year	Performance
Graduation Intermediate/+2	IIT Bombay Kendriya Vidyalaya	2010 2008	7.85 CPI 82.40%
Matriculation	Kendriya Vidyalaya	2006	90.60%

INTERNSHIPS:

- Internship at Indian Institute of Management, Ahmedabad under Prof. Anil K. Gupta [December 2010]
 - Worked in <u>SRISTI</u> (Society for Research and Initiatives for Sustainable Technologies and Institutions) on developing a program to search through the US patent database and save relevant patents locally
 - Researched and analyzed patents for <u>SRISTI</u> and <u>National Innovation Foundation</u>
- Internship at University of Alberta, Edmonton, Canada under Prof. Ken Cadien [May to July 2011]
 - Awarded the University of Alberta's Summer Research Internship Award 2011
 - Developed a theoretical and mathematical model of atomic layer deposition of chromium oxide on a thin layer of chromium in an Atomic Layer Deposition (ALD) Chamber
 - Computed the activation energy of diffusivity of oxygen in chromium oxide using regression analysis
 - Found excellent agreement of the formulated equations with the experimental results and further research is going on in this field

KEY ACADEMIC PROJECTS AND HIGHLIGHTS:

• Intellectual Property Rights

[2009, 2010]

- Completed a six week long workshop, lecture series and case studies on Intellectual Property Rights and studied subject matter of Copyright, Trademarks, Design Rights, Patinformatics
- Completed a four week long advanced course on Patent Searching and Drafting

• Rashtriya Chemical Fertilizers (RCF) Limited

[2010]

- Successfully completed the training programme "Production of sulphuric acid technology and work visit"
- Prepared a detailed project report of the same including calculations of energy and flow of all the streams

Monte Carlo Simulation

[2010]

- Simulated the three dimensional Lennard-Jones system in the microcanonical ensemble in MATLAB
- Performed Monte Carlo simulations on a one dimensional random walker and found its self-diffusion coefficient

• Unique Identification Project under the guidance of Dr. Deepak B Phatak

[2009]

- Studied the basics of image processing
- Implemented fingerprint minutiae detection in C++

COMPUTER SKILLS:

- Programming Languages: C++, Java, MATLAB, Scilab, Shell Scripting, Python, LaTeX
- Web Design/Documentation: HTML
- Operating systems: Windows (XP, Vista, 7), Linux
- Other Utilities: Microsoft Office, Adobe Photoshop, Adobe After Effects, Sony Vegas

COURSES UNDERTAKEN:

Core Courses

Transport Phenomena, Solid Mechanics, Heat and Mass transfer, Advanced Transport Phenomena, Fluid Mechanics, Molecular and statistical Thermodynamics, Chemical Reaction Engineering, Mass Transfer Operations, Material Science

• Mathematics Courses

Linear Algebra, Differential Equations and Calculus

Other Departments

Chemistry, Computer Programming and Utilization, Engineering Drawing and Environmental studies, Economics, Modern Physics (Theory of Relativity), Data Analysis and Interpretation, Philosophy, Intro to Electrical and Electronics Circuits, Molecular Cell Biology, Mechanical Workshop

POSITIONS OF RESPONSIBILITY:

Manager, Marketing, Azeotropy

[2011- present]

- Leading a team of about ten coordinators who contact chemical engineering companies and related organizations for sponsorship for <u>Azeotropy</u> (The chemical engineering festival of IIT Bombay)

Hostel Film and Media Secretary

[2010-2011]

- Coordinated the making of five short films which won several awards
- Conducted a film making workshop which was attended by 120 students

• Hostel Election Officer

[2011]

- Conducted election for 25 candidates for the posts of secretaries and councillors of Hostel council
- Publicized Techfest by helping in painting a mural on a huge wall as an Organizer of Techfest 2009 and worked as a Coordinator of Infrastructure in Techfest 2010
- Successfully organized a show by eight professionals performing *Capoeira*, a form of Brazilian martial art as an **Organizer** of **Mood Indigo 2009** [2009]

ACADEMIC ACHIEVEMENTS AND SCHOLARSHIPS:

- Secured 99.2 percentile in IIT Joint Entrance Exam-2009
- Secured 99.6 percentile in All India Engineering Entrance Examination-2009
- Awarded the IIT Bombay Heritage Fund Scholarship for a period of one year
- Awarded Certificate of Distinctive Performance in National Science Exhibition 2006
- Awarded an excellence certificate in Winter School workshop from IIT Bombay

EXTRA CURRICULAR ACTIVITIES:

Cultural:

- Secured 1st rank in Debating and 2nd rank in Speech Competition at school level
- Performed in a group dance in **Gyrations** (Annual Dance Competition of IIT Bombay)
- Awarded Hostel Special Mention for exemplary contribution to the Performing Arts Festival, IIT Bombay
- **Directed** and **edited** a few short films as a member of **Silverscreen** (Film club at IIT Bombay)

Sports:

- Was awarded an A grade in Basic Mountaineering Course, conducted by Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports (ABVIMAS)
 - Attained a height of 15,500 feet and learnt basic mountaineering skills like rock climbing, snow walking, ice climbing, river crossing, jumaring, cramponing and rappelling
 - Managed a team of 8 members as the **Rope Leader**
- Was part of the **Basket Ball** team of **National Sports Organization (NSO)** in IIT Bombay and was coached for one year by the institute coach Mr Edwin
- Was ranked 21st in i-race (Oct 2010), a racing event, conducted in India and London
- Secured 2nd rank in Table Tennis and 3rd rank in Discuss Throw at school level