

# Resume

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## Educational Background

<u>Year</u>	<u>Details</u>	<u>Institute/ School</u>	<u>C.G.P.A / Percentage</u>
2004 - present	B. Tech , 4 <sup>th</sup> year	I.I.T., Delhi	8.65 / 10
2003	All India Senior School Certificate Examination (A.I.S.S.C.E)	Delhi Public School, R.K. Puram, Delhi	90.6 %
2001	All India Secondary School Examination (A.I.S.S.E)	Don Bosco School, Alaknanda, Delhi	90.6 %

- Current Department Rank is **8<sup>th</sup>** in a class of **46** students.
- Was school topper in the 2001 A.I.S.S.E examinations in a field of about 200 students.

## Scholastic Achievements

- **NIIT, Delhi:** Achieved a rank of **80** among **67,000** students in the national **NIIT IT Aptitude Test 2007**
- Was 1 of 3 students selected for **Foreign Exchange Program** to Ecole des Mines de Douai for a semester (2006-07)
- Was selected for **Summer Undergraduate Research Award (SURA)** in my college for a funded summer project during summer vacations 2006
- Awarded **Dean's Merit Award** for securing an S.G.P.A of **9.11** after 1<sup>st</sup> semester, the highest in the Department
- Secured an All India Rank of **4** from among nearly **1 lakh** candidates in **CEE (Combined Entrance Examination – 2003)**
- Was among **50** students who qualified for the national level contest from Delhi region in **INPhO** (Indian National Physics Olympiad) – 2003
- Secured **16<sup>th</sup>** position in **RMO** (Regional Mathematical Olympiad) – 2003

## Summer Internship

Worked as an intern in **Remote Prognostics Laboratory (RPL)**, an undertaking of **GE Global Research Center (GRC)**. RPL works on fault diagnosis and prognosis technologies for a variety of large

mechanical systems – Wind turbines, compressors, aviation engines etc. My work was called '**Blade Health Monitoring**', dealing specifically with engine blades. Broadly speaking, I had to

- Study and improve on capacitive sensor design aspects
- Study mathematical models for **blade vibration** analysis and develop simulation models in MATLAB

Some of the major achievements were –

- I proposed different schemes and circuit models that improved upon existing systems, in terms of sensitivity, SNR improvement etc
- Comprehensively researched blade vibration models and developed simulations to picture real life data sets, which proved to be insightful and useful in optimization of sensor topology and count
- Learned a great deal on how R&D labs are organized and managed!

## Project Experience

- **Effect of Power Control on Forwarding Strategies:** Currently working on this as my B.Tech project. Deals with transmission power control strategies in wireless networking
- **Computer Vision:** Developed Computer Vision software (in **OpenCV**) for elementary shaped object recognition for an Industrial level robot, at Ecole des Mines de Douai (**Oct-Nov 2006**)
- **Universal Media Player:** Researched and developed multimedia streaming techniques for mobile phones using **Java ME** (Micro Edition) on **Symbian OS** platform (as part of **SURA**) (**May-Jul 2006**)
- **Automated classroom attendance system:** Developed a webcam based system in **OpenCV** and **Visual C++** for automatically registering the attendance of a typical classroom (**Jan-Apr 2006**). Done as a course project
- **Speech signal representation and compression:** Discrete signal modeling of speech and development of compression algorithms related to Linear Predictive Coding (LPC) (**Dec 2005**)

## Extracurricular activities and interests

- Actively involved in the **English Debating and Literary Club (EDLC)**, specifically in general debating and word games.
- Interested in quizzing and trivia competitions (specially sports and entertainment based). Participated in various intra-college quizzing events
- Adept at playing lawn tennis and badminton. Was part of a select group of tennis players in Chennai as part of **NSO (National Sports Organization)** and at Ecole des Mines de Douai
- Started a school mathematics hobby club called '**The Masterminds**' during my 9<sup>th</sup> and 10<sup>th</sup> standards. Organized its meetings and competitions for the years.

## Relevant Skills

- **Computer related :**
  - Programming Languages :* C / C++, Visual C++, Java, SML, OpenCV library
  - Operating Systems :* Windows, Red Hat Fedora Core, Ubuntu etc
- **Languages :** Fluent in English, Hindi, apart from a working knowledge of French.