Yohan Nikhil Mathew | **07D01017**
Aerospace Engineering | **Dual Degree (B.Tech + M.Tech)**
Indian Institute of Technology, Bombay | **Male**
Currently in 4th year | **DOB: 04/10/1989**

Examination	University/Board	Institute	Year	CPI/%
Graduation	IIT Bombay	IIT Bombay	2010	7.29
Intermediate	Andhra Pradesh Board of Intermediate	FIITJEE Hyderabad	2007	90.30
Matriculation	ICSE	Hyderabad Public School (Begumpet)	2005	89.30

ACADEMIC ACHIEVEMENTS

- Stood 1st in the department among the Dual Degree students in the Autumn 2009 semester
- Excelled at Mathematics exams while at school (held by NSW University, Ramanujan Maths Academy, etc.)
- Relevant courses done: Economics, Data Interpretation, Programming, Engineering Design, Optimization
- Programming languages known: C++, Java, MATLAB

INDUSTRIAL EXPERIENCE

NACIL (Air India) *(December 2009)*

Familiarization of airline maintenance practices

- Studied aircraft flight scheduling procedures with respect to maintenance requirements
- Investigated key maintenance processes and issues related to inventory management of spares
- Created a concise synopsis of the book 'Handling the Big Jets', a popular reference handbook for pilots

Infotech Enterprises Ltd. *(May 2009 – July 2009)*

CFD Analysis of External compressible flows over Airfoil

- Modeled and analyzed viscous and inviscid compressible flows for NACA 0012 airfoil using FLUENT

ACADEMIC PROJECTS

Aircraft Design *(July 2010 – October 2010)*

Design of 150 seater aircraft in a 5-member team

- Designed major components & determined a preliminary design based on current aircraft trends
- Evaluated production, operating and life-cycle costs of the aircraft using appropriate cost models
- Performed design trade studies to determine the most cost-effective configuration

Engineering Design *(July 2008 – November 2008)*

Concept generation for posture-correction chair

- Identified requirements and translated them into design criteria using tools like the QFD House of Quality
- Evaluated list of concepts using Pugh Matrix & Concept Scoring Matrix methods to determine the best one

Land-based Gas Turbine Exit Diffuser Analysis *(August 2010 – To date)*

Enhancement of aerodynamic efficiency of Siemens Combined Cycle Powerplant

- Determined the variation of primary metrics through the diffuser & found areas requiring improvement
- Designing injection system to stabilize flow & prevent separation (expected to increase efficiency by 3-4%)

EXTRACURRICULAR ACTIVITIES

- Coordinator, Mood Indigo '09 – Helped organize high profile concerts and an all-India band competition
- Made a High Voltage, High Frequency plasma globe and presented it at the Science Club Orientation
- Completed Swimathon '08 and '09, a 6-hour swimming marathon organized by IIT Bombay
- Member, Insight (campus newsletter) and Airspace (Aerospace department magazine/newsletter)
- Encouraged students at Shantimandiram Boys Home to consider long-term benefits of higher education, as opposed to a job immediately after school