

Abhinav Garg Aerospace Engineering Indian Institute of Technology Bombay

120010038 UG Third Year (B.Tech.) Male

DOB: 03/09/1993

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2015	9.07
Intermediate/+2	Central Board of Secondary Education	Delhi Public School Bhopal	2012	95.80
Matriculation	Central Board of Secondary Education	Delhi Public School Bhopal	2010	9.80

Academic Achievements

- Awarded AP grade in AE 214 (Thermodynamics) for recognising exceptional performance in the course
- Secured All India Rank 1562 in JEE-2012
- Secured All India Rank 460 in AIEEE-2012
- Awarded Merit Certificate by CBSE for being among the top 0.1% in Mathematics in All India Senior School Certificate Examination 2012, with a score of 100/100
- Awarded National Talent Search Scholarship (NTSE) by National Council of Educational Research and Training (NCERT)
- Qualified all the phases of Kishore Vaigyanik Protsahan Yojana (KVPY) 2012, conducted by Indian Institute of Science (IISc)
- Attended Computing Camp at National University of Singapore on a full scholarship by Science Olympiad Foundation, India [December 2011]
- Scored 2270 (710+800+760) in SAT
- Scored 800 in Math level 2, 800 in Physics, and 800 in Chemistry SAT Subject Tests
- Besides IIT Bombay, had successful admissions to University of Cambridge and Nanyang Technological University, Singapore

Internships

Function Space – Software Developer Summer Intern

[May –July 2014]

- Worked on developing new features for the existing platform
- Developed skills in web development and design, and various scientific computing packages
- o Gained proficiency in Python, HTML, CSS, and JavaScript
- Shopsense Hackers and Painters Winter Internship Programme 2013 [December 2013]
 - Worked on developing demo applications for the company
 - Learnt and developed skills in Python, Photoshop, Qt and Excel
 - Learnt and extensively used Github to manage code and collaborate

Positions of Responsibility

Institute Secretary of International Relations, IIT Bombay [2014-15]

o Student representative at the International Relations Office of IIT Bombay

President, Student Council, Delhi Public School Bhopal [2011-12]

• Vice-Head Boy, Student Council, Delhi Public School Bhopal [2010-11]

Projects Undertaken

- Institute Technical Summer Project Automatic Flight Control System: [Summer 2013]
 - o Built a remote controlled aircraft with an on-board autopilot
 - The aircraft had good flight characteristics, with well determined airfoils
 - Values (roll and pitch angles) obtained from gyroscopes and accelerometers (best estimates using Kalman Filter) were fed through a PID control loop, and appropriate output was given to servos to maintain the aircraft in a reference position
- Course Projects:
 - o Introduction to Engineering Design (AE 207) Uphill Cycling Assister
 - o Computer Programming and Utilization (CS 101) Secure Database

Technical Activities

 Have taken part in many technical competitions organized at IIT Bombay - such as XLR8 (remote controlled racing bot), Line Follower (autonomous line following bot) and RC Plane (remote controlled aircraft)

Software Skills

- Programming languages: C++, Python, JavaScript, Java
- Markup/style-sheet languages: HTML, CSS, Latex
- Software packages: MATLAB, Simulink, Eagle, AutoCAD, Microsoft Office, Adobe Photoshop

Teaching Assistantship, Mentorship & Volunteer Work

- Mentor at Department Academic Mentorship Programme Department of Aerospace Engineering, IIT Bombay [2014-15]
- Teaching Assistant (TA) for ME209x (Thermodynamics), a MOOC being offered on edX by IIT
 Bombay [August September 2014]
- Mentor at Avanti Fellows

[2013-14]

• Buddy for visiting students under the Buddy Programme at IIT Bombay

[Autumn and Spring semesters, 2013]

Extracurricular Activities

- Sports:
 - o Undertook NSO Swimming in the freshman year
 - Completed Swimathon 2013, a swimming endurance event at IIT Bombay swam 12.2 km in 12 hours
- Writing:
 - Won the 1st Prize in WriteUp 3.0, a cultural open competition at IIT Bombay
 - Have worked at InsighT Student Media Body of IIT Bombay
 - Frequent blogger
- Public Speaking:
 - Won the Best Speaker Award in Shri Gurudev Gupta Inter-School Debate Competition, organized at Delhi Public School Bhopal in January 2012
- Music:
 - Singer and guitar player
 - Have played at various in-campus concerts (Acoustic Dusk) and competitions (member of the winning band in Freshiezza Phase 2)
- Additional learning:
 - Frequent participant of courses on Coursera and edX