

Amalshwar Sinha (07ME1042)

Education			
Year	Degree/ Certificate	Institute/ School, City	CGPA
2011	B.Tech. (Hons), Mechanical Engineering	Indian Institute of Technology, Kharagpur	7.09
2007	XII: Board of Intermediate Education.	Vijay Ratna Junior College, Hyderabad	92.6%
2005	X: CBSE	Kendriya Vidyalaya, Picket, Hyderabad	88%
Academic Achievements			
Examinations	<ul style="list-style-type: none">All India Rank 1056 in IIT-JEE 2007, out of 350,000 candidates.(99.7 percentile)All India Rank 2465 in AIEEE 2007, out of 600,000 candidates.(99.6 percentile)4th in 7th Junior Mathematics Olympiad 2003, in Hyderabad Region.All India Rank of 590 in 6th National Science Olympiad, 2003.		
Scholastic Achievements	<ul style="list-style-type: none">Scholarship in National Talent Search Exam by NCERT'05 (1000 out of 250,000)High Distinction in the Australian National Chemistry Quiz, conducted by the Royal Australian Chemical Institute		
Internships			
Schlumberger Asia Services Ltd		Wireline Segment	May 2010 – June 2010
<ul style="list-style-type: none">Involved in field and base operations along with visits to 2 Oil Rigs.Developed an all-weather temperature measurement device for well-logging tools.Reduced the cost of the device by 97%.			
Loughborough University, UK		Holywell Mechatronics Research Centre	May 2009–July 2009
<ul style="list-style-type: none">Analysis and Improvement of a Bowden Cable based Actuation system of a 6-DOF Biped Robot Leg.Computer control and testing with a Data acquisition device.Further improvements mimicking the human limb.			
Select Projects			
B.Tech Project		IIT Kharagpur	August 2010 – Present
<ul style="list-style-type: none">Development of a novel Concentrated Photovoltaic Solar energy generation system.Infused economic analysis into the mechanical design, to achieve practical feasibility.			
Summer Project		Precision Automation & Robotics India Ltd.	May 2008 – June 2008
<ul style="list-style-type: none">Software for a Rubik's Cube Solving RobotImplementation of a Cube Solver Algorithm on a hypothetical robot.Development of a Graphical User Interface for feeding in existing configuration.Generating the discrete logical commands for the robot.			
Innovations Lab		IIT Kharagpur	August 2008 – April 2009
<ul style="list-style-type: none">Mechanical improvements in the Amber Charkha, commercially used to produce yarn.Speed regulation to achieve optimum rotation speed for best quality yarn.			
Positions of Responsibility			
Head		ROBOTIX, IIT Kharagpur	May 2009 – March 2010
<ul style="list-style-type: none">ROBOTIX - national level robotics competition held with the Tech-fest Kshitij. Duties are Nationwide Publicity, complete Event Management. As a team, managed 2000 participants.Head of the autonomous robotics event Xplode, India's first collaborative robotics event.			
Sub-Head		ROBOTIX, IIT Kharagpur	May 2008 – April 2009
<ul style="list-style-type: none">Prepared a tutorial for the event 12 Doors Down, had 10,000 hits in 15 days.Lectured on basic robotics to over 1000 students at major cities like Hyderabad and Kolkata			

Senior Member	Kharagpur Robotics and AI group	August 2008 - Present
<ul style="list-style-type: none">• Led 3 project teams on robot manipulators and car parking robots.• Extensively delivered lectures to freshmen.• Participated in technical festivals across the country, from Kshitij–IIT Kharagpur to Tryst–IIT Delhi.		
Head, Winter Workshop	Technology ROBOTIX Society	December 2008
<ul style="list-style-type: none">• Hands-on workshop for introducing first years to robotics.• Introduced several new technical features.• Radically improved the standard of the workshop.		
Member, Organizing Team	RoboCup Challenge @India 2009	May 2009 – August 2009
<ul style="list-style-type: none">• RoboCup Challenge, internationally held Robo-Soccer tournament.• Held for the first time in India.		
Captain	Hardware Exhibition	July 2010 - Present.
<ul style="list-style-type: none">• Responsible for the hall’s participation in the Inter-Hall Hardware Exhibition competition.		
Extra Curricular Activities		
Sports	<ul style="list-style-type: none">• Participated in Inter-Hall Shot-Put, Discus Throw and Hammer Throw• Green Belt in Shotokan style Karate. (3 belts below black)• High Altitude Trekking near Kanchanjunga, to heights of 11,000 feet.	
Social Service	<ul style="list-style-type: none">• In NSS Hindi Literacy division. Motivated 50 students from a village to study.• As a school student, participated in raising funds for HelpAge India.• Participant in the All India Blind Welfare Week, 2001.	
Technical Skills		
High Level Programming	C, Visual Basic, GwBasic, HTML, VBScript; Microcontroller programming in C, Visual Basic (AVR & 8051/8052)	
Low Level Programming	Assembly Language for 8051/8052 and AVR microcontrollers.	
Design	AutoCAD, basics of Maya and SolidEdge	