

# SURENDRA VERMA|10AE30018

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## ACADEMIC QUALIFICATION

Program	Institution	CGPA	Year
B. Tech and M. Tech in Aerospace Engineering	Indian institute of technology Kharagpur	<b>6.98</b>	2015
XII - AISSCE	Kiddy's Corner School , Gwalior (CBSE)	<b>75%</b>	2010
X – AISSE	Kiddy's Corner School , Gwalior (CBSE)	<b>77%</b>	2008

## PROJECTS

<b>TruckHub.co.in</b> (Jun 14 – Aug 14)	<ul style="list-style-type: none"><li>Real Time Geo-Location based website.</li><li>Designed and developed a website with inherent ability tracked specific mobile user in real time</li></ul>
<b>Inventory Management System</b> (June 2014)	<ul style="list-style-type: none"><li>Developed a website using <b>PHP</b> and <b>MYSQL</b> which allows lab in-charge to keep records of all issued items to students.</li><li>Established system is currently handling data of 500 students in Aeromodelling laboratory, Department of Aerospace, IIT Kharagpur.</li></ul>
<b>Mess Monitoring System</b> (February 2013)	<ul style="list-style-type: none"><li>Developed Java software using Swings which processes and records input data through a smart card.</li><li>Engineered input device to read <b>QR code</b> data using cam and convert it to a input format to the software.</li><li>After successfully implementation , system able to save <b>2100000</b> INR/a</li><li>Created web based UI for students to access account information choosing and suggesting meal options.</li></ul> Work Environment : <b>JAVA, Swings, PHP , HTML, CSS, Windows</b>
<b>Library Management System</b> (March 2013)	<ul style="list-style-type: none"><li>Designed an online user interface using PHP allowing user to list issued/reserved/available in hall library</li><li>Established system is currently used by 630 students in Radhakrishnan Halls of residence, IIT Kharagpur.</li></ul> Work Environment : <b>PHP, MYSQL ,Bootstrap</b>
<b>Bezier extraction of nurbs</b> (May2014 - Present)	<ul style="list-style-type: none"><li>Developed program to plot local and global extraction operator for 1-D and 2-D B-spline</li><li>Developed <b>MATLAB</b> and <b>C</b> Program for Plane Stress problem of Quarter disc Annulus using Isogeometric</li><li>Finite Element Analysis based on Bezier extraction of NURBS.</li></ul>
<b>B. Tech Project</b> (July 2013 – April 2014)	<ul style="list-style-type: none"><li>Developed <b>MATLAB</b> program to find natural frequency and mode shapes of beams and plates.</li><li>Developed <b>MATLAB</b> program to find critical buckling load for beams and plates under boundary conditions.</li></ul>
<b>Term project</b>	<ul style="list-style-type: none"><li>Developed a <b>MATLAB</b> code for finding critical failure loads of various composite laminates.</li><li>Determination of center of Gravity of a wing from recorded data using <b>MATLAB</b> code.</li><li>Determination of node displacement of a 2-D truss using <b>MATLAB</b> CODE</li></ul>

## COMPUTER SKILLS

<b>Languages</b>	<b>C</b> (proficient), C++, Java (Familiar),Python (Basic), SQL (proficient)
<b>Tools and IDEs</b>	MATLAB (proficient), Latex(proficient), Code Blocks, Solid Works,ANSYS, Net Beans,MS-Office, NASTRAN
<b>Web Development</b>	HTML,CSS, <b>PHP</b> , MYSQL, Bootstrap , JavaScript(basic), JQuery(basic), Ajax(basic)
<b>Platforms</b>	Windows, Linux

## POSITIONS OF RESPONSIBILITY

<b>Vice-Captain Illumination RK Hall</b>	<ul style="list-style-type: none"><li>Successfully organized biggest event of hall required participation of <b>700</b> students. (Jul 2012 – Nov 2013)</li><li>Managed and guided a team of 26 members, while collaborating with captains</li></ul>
<b>Website Head RK Hall</b>	<ul style="list-style-type: none"><li>Managed and guided a team comprising 3, while collaborating with Council members, for development of the official website of RK Hall, first time in the RK hall history. (Jan 2012 - Present)</li><li>Developed the website from scratch, planning the skeletal and subsequently adding people to the team.</li><li>Created a Website to deliver activities and notice of hall to current boarders and alumni.</li><li>Created an <b>Alumni Portal</b> to maintain a proper database of pass out boarders and maintain a proper relationship with alumni.</li></ul>
<b>Mess Auditor RK Hall</b>	<ul style="list-style-type: none"><li><b>Only post</b> in the institute for student who get paid of amount Rs 150000/a. (Jul 2012 – Apr 2013)</li><li><b>Manual checking</b> of mess bills with tender book for any fraud detection in the mess bills.</li></ul>
<b>Website Co-coordinator Dept. of Aerospace</b>	<ul style="list-style-type: none"><li>Managed and guided a team comprising 2, while collaborating with Faculty members and respective Laboratory in charge, for development of official website of Department of Aerospace Engineering. (Jul 2013 - Present)</li></ul>
<b>Back End Developer Carbuk.com</b>	<ul style="list-style-type: none"><li>Developed an <b>online portal</b> for taxi booking to various places though website and keeping record of all booking using <b>PHP</b> and <b>MYSQL</b>. (Mar 2013)</li></ul>
<b>Sub Head Kshitij</b>	<ul style="list-style-type: none"><li>Manage and maintain the administration of all reservation, cancellation and no shows accommodation for participants' coming for India's largest techno management fest.</li></ul>

## EXTRA CURRICULAR ACTIVITIES

<b>Environmental</b>	<ul style="list-style-type: none"><li>Analyzed the fishing scenario in Kashijora village under Rural Development Centre, IIT Kgp.</li><li>Developed a <b>model</b> to increase fishing production for commercial level. (April 2014)</li></ul>
<b>Technical</b>	<ul style="list-style-type: none"><li>Part of Product Design Team, Hardware Modelling Team.</li></ul>
<b>Sports</b>	<ul style="list-style-type: none"><li>Part of Athletics team in Long Jump Event.</li></ul>
<b>Social</b>	<ul style="list-style-type: none"><li>Part of silver wining Dramatics Team.</li></ul>