

KEY ACADEMIC PROJECTS	<b>Chess Titans</b> <i>Guide: Prof. Amitabha Sanyal</i> <b>Spring 2013</b> <ul style="list-style-type: none"> <li>• One player chess game in PLT Scheme using in-built GUI Toolkit in DrRacket</li> <li>• AI makes use of the <b>Minimax Algorithm</b> with <b>Alpha-Beta Pruning</b></li> <li>• Heuristics to decide the best move for the computer, at any stage of the game</li> </ul>
	<b>E-Ball</b> <i>Guide : Prof. Abhiram Ranade</i> <b>Autumn 2012</b> <ul style="list-style-type: none"> <li>• Classic brick breaker game in C++ using <b>Particle Physics</b></li> <li>• Randomly generating levels with varying difficulty and ball speeds</li> <li>• <b>User Interface</b> designed using the <b>simplecpp</b> package</li> </ul>
PROFESSIONAL EXPERIENCE	<b>Product Development Intern</b> <b>Winter 2013</b> <i>Tushky Events and Entertainment</i> Designed a Ranking Algorithm for events and their sellers based on social and analytic data and implemented it on real data.
ACHIEVEMENTS	<ul style="list-style-type: none"> <li>• Winner at <b>Microsoft Appathon</b>, <i>code.fun.do</i> held at IIT Bombay in Spring 2014</li> <li>• Selected in the first round of <b>Microsoft Hackcon 2014</b>, ranking <b>8<sup>th</sup></b> overall</li> <li>• Podium positions in all freshmen robotics competitions:             <ul style="list-style-type: none"> <li>– <b>1<sup>st</sup></b> in <i>autonomous line follower</i> making competition,</li> <li>– <b>3<sup>rd</sup></b> in <i>RC car</i> designing competition and</li> <li>– <b>2<sup>nd</sup></b> in <i>RC football-playing bot</i> making competition</li> </ul> </li> </ul>
OTHER PROJECTS AND HACKS	<b>Kapi</b> <b>Spring 2014</b> <i>Microsoft code.fun.do</i> <ul style="list-style-type: none"> <li>• A <b>note-making app</b> that, along with normal text, typesets maths in <math>\text{\LaTeX}</math> format without having to write complicated code, rendered using <i>MathJAX</i> library</li> <li>• Also lets the user draw diagrams and graphs on a canvas (rendered through HTML)</li> </ul> <b>Rumor Roll!</b> <b>Autumn 2013</b> <i>Yahoo! HackU</i> <ul style="list-style-type: none"> <li>• A website that displays links, tweets and videos related to rumors about the query</li> <li>• Developed using a mashup of Yahoo! Boss API, Twitter API v2.0 and YouTube API</li> </ul> <b>Android Desktop Controller</b> <b>Summer 2013</b> <i>Institute Technical Summer Project (ITSP)</i> <ul style="list-style-type: none"> <li>• An Android application that uses Bluetooth to control PC through an Android mobile</li> <li>• Used Java's <b>Robot</b> class to assign PC's features to commands passed by device as strings</li> </ul> <b>Hostel Website</b> <b>Autumn 2013</b> A site for all the hostelites to stay updated on the current events in the hostel, and also a common request/complaint portal, developed using <b>Twitter Bootstrap v3.0</b>
PROGRAMMING SKILLS	<ul style="list-style-type: none"> <li>• <b>Languages:</b> C++, Java, MIT-Scheme, Python, Rebol, Prolog, <math>\text{\LaTeX}</math> 2<sub>ε</sub></li> <li>• <b>Web Development:</b> HTML5, CSS3, PHP, JavaScript</li> <li>• <b>Engineering Softwares:</b> MATLAB, SCILAB, LabView</li> <li>• <b>Environments:</b> Windows, Linux</li> </ul>

SCHOLASTIC ACHIEVEMENTS	<ul style="list-style-type: none"> <li>• <b>All India Rank 104</b> (<i>State Rank 2</i>) among 3.75 lakh participants in <i>National Level Science Talent Search Examination (NSTSE) 2012</i> conducted by Unified Council</li> <li>• Secured <b>All India Rank 1</b> in <i>International Olympiad of Science (IOS) 2009</i></li> <li>• <b>All India Rank 53</b> (<i>State Rank 1</i>) in <i>National Science Olympiad (NSO) 2008</i> conducted by Eduheal Foundation amongst nearly 4 lakh participants</li> <li>• Pursuing <b>Minors</b> at <i>Industrial Design Centre, IIT Bombay</i></li> <li>• Amongst <b>top 0.005%</b> in AIEEE 2012, an exam taken by over a million students</li> </ul>
FIELDS OF INTEREST	<ul style="list-style-type: none"> <li>• Machine Learning</li> <li>• Algorithm Design and Analysis</li> <li>• Cryptography</li> <li>• Artificial Intelligence</li> <li>• Functional Programming</li> </ul>
POSITIONS OF RESPONSIBILITY	<p><b>Convener</b>, <i>Web and Coding Club</i>, IIT Bombay <b>April 2013 – Present</b>  Convener of one of the largest clubs of IIT Bombay which supports coding and related activities in the institute, promoting coding culture across students of all departments. Responsible for organising Hackathons, talks and many other coding related events.</p> <p><b>Web Secretary</b>, <i>Hostel 3</i>, IIT Bombay <b>April 2013 – Present</b>  Elected as Hostel Web Secretary for Hostel 3. Responsibilities include:</p> <ul style="list-style-type: none"> <li>• Conducting intra-hostel web development workshops and competitions.</li> <li>• Design and maintenance of the hostel website and ensuring that everything done by the hostel council is transparent and publicised through a common web portal</li> </ul> <p><b>Coordinator</b>, <i>TechFest 2014</i> <b>May 2013 – January 2014</b>  Introduced animation effects on the website for TechFest 2014 using jQuery plugins and coordinated a workshop on Swarm Robotics.</p>
EXTRA CO- CURRICULAR ACTIVITIES	<ul style="list-style-type: none"> <li>• Worked as a market analyst at Startup Today (a crowdfunding startup)</li> <li>• Participated in several speaking events, including <b>MUNs</b>, <b>debates</b> and <b>extempores</b></li> <li>• Written many blogs, including <b>Web Development</b> blogs for <i>Web and Coding Club</i></li> <li>• Active user on <b>Sphere Online Judge (SPOJ)</b>, <b>HackerRank</b> and <b>Stack Overflow</b></li> <li>• Completed the year-long course by <b>National Sports Organization (NSO)</b> in <b>Squash</b></li> <li>• Enthusiastic in swimming and water adventure sports like Scuba</li> <li>• Worked as an organiser in Mood Indigo 2012, TechFest 2013 and E-Summit 2013</li> </ul>
KEY COURSES UNDERTAKEN	<p><b>Core:</b>  Data Structures, Abstractions and Paradigms in Programming, Software Systems*, Design and Analysis of Algorithms*, Logic Design*, Computer Programming and Utilization, Discrete Mathematics, Introduction to Machine Learning</p> <p><b>Other:</b>  Calculus, Linear Algebra, Differential Equations, Numerical Analysis*, Modern Physics, Environmental Studies, Economics, Basics of Electronics and Electrical Engineering, Chemistry, Basics of Visual Communications, Data Analysis and Interpretation, Sound and Music Design</p> <p><b>Online Courses:</b>  Algorithms: Part I and Part II (Prof. Robert Sedgewick and Prof. Kevin Wayne), Learn to Program: The Fundamentals (Prof. Jennifer Campbell and Prof. Paul Gries), Machine Learning (Prof. Andrew Ng)</p> <p>Note: The * marked courses will be completed by April 2014.</p>