

OBJECTIVE

To learn, research, collaborate and eventually develop new, intelligent technology.

EDUCATION AND TEST SCORES

- **Bachelor of Engineering (B.E.) (Computer Engineering)** **65.33 %**
Course Duration: Aug 2004 – May 2008
Vivekanand Education Society's Institute of Technology, University of Mumbai, India
- **GRE Score** : **1480 (780 Q, 700V, 5.0 AWA)**
- **TOEFL (iBT) Score** : **112/120**

MAJOR COURSES UNDERTAKEN

Intelligent Systems, Analysis of Algorithms, Probabilistic Mathematics, Computer Networks, Mobile Computing, Web Technologies, Advanced Database Management Systems, Computer Graphics, Theoretical Computer Science, Systems Programming, Operating Systems (with UNIX & Windows 2000 case studies), Computer Organization, Advanced Microprocessors, Software Engineering.

SKILLS

- **Programming:** C, C++, Java, VB, C#.NET, VB.NET, Embedded C (AVR Microcontrollers), MATLAB
- **Development Frameworks:**
Agent Development: JADE (Java Agent DEvelopment) by Telecom Italia Lab
Game Development: Microsoft XNA Framework
- **Scripting:**
Client Side - Java Script, VB Script
Server Side – PHP, ASP, ASP.NET, JSP
- **Databases:** MS SQL Server, IBM DB2, MS Access, MYSQL
- **Analysis and Design:** Visual Paradigm, Rational Rose
- **XML Technologies:** XML, XML Schema, DTD, RSS.
- **Web Authoring:** Dreamweaver, Microsoft FrontPage.
- **Multimedia:** Adobe Photoshop CS, Fireworks MX, Flash MX.
- **Operating Systems:** Microsoft Windows, Red Hat Linux, UNIX, CentOS.

PROJECTS

- **A Multi-Agent System for Call Admission Control in a Cellular Network** **(Ongoing)**
 - A multi-agent system which employs co-operative negotiation for taking call admission decisions.
 - Being developed using the Java Agent DEvelopment (JADE) Framework.
 - Objective is to develop a system which provides much better QoS and channel utilization than provided by the existing Distributed Call Admission Control Schemes.
- **Anti-Money Laundering (AML) Solution** **(Ongoing)**
 - A web based solution which uses the risk based approach to deter money laundering activities by identifying suspicious transactions using pattern recognition.
 - Being developed using DB2 Database Server, WebSphere Application Server and Eclipse. Script used is JSP.
 - To be submitted to 'The Great Mind Challenge', an IBM initiative.
- **Game Development using Microsoft XNA framework** **(Ongoing)**
 - An installable 'Space Shooter' game using Microsoft XNA framework (code written in C#) along with its installation guide, help files and documentation.
 - Another objective is to study the Microsoft XNA framework and write a study based paper on its scope.
- **Autonomous Robots for Robocon 2008** **(Ongoing)**
 - Robocon is an Asia-Pacific level robotics contest conducted by Asia-Pacific Broadcasting Union (ABU). First a national level contest will be held by Doordarshan and MIT, Pune.
 - The autonomous robots will represent V. E. S. Institute of Technology at the national level in March 2008.

- **Praxis 2007 Website** **(Aug-Sep 2007)**
 - The website for the inter-collegiate technical festival organized by V. E. S. Institute of Technology.
 - Includes all features of the Praxis 2006 website (which I made in Aug-Sept 2006) as well as many AJAX scripts to make the website rich. Also, the content management system was improved greatly.
 - Platform/Scripting Language: PHP (Unix Server), AJAX
 - Project Link : <http://praxis.vesit.org>

- **IEEE VESIT Student Branch Website** **(Feb-Mar 2007)**
 - This International Award winning website features members' area, member blogs, project sharing facility, RSS feeds, Website for the Visually Disabled, and lots more.
 - Platform/Scripting Language: ASP.NET 1.1 (Windows Server)
 - **Second Prize at Asia-Pacific Level.** International Contest Result Awaited.
 - Project Link : <http://www.ieee-vesit.org>

- **IEEE 360 degrees – Online Contests** **(Jan-Feb 2007)**
 - IEEE VESIT Student Branch hosts online events for IEEE 360 degrees, a technical festival conducted by 5 student branches across Mumbai city. I designed 4 contests – Treasure Hunt, C/C++ Coding contest, Digital Logic Circuit design contest and Web Designing contest - and implemented them in ASP.NET 1.1
 - Platform/Scripting Language: ASP.NET 1.1 (Windows Server)
 - Project Link : <http://www.ieee360.com/2007/>

- **VESIT Online – A Web Application** **(Aug-Sep 2006)**
 - A web application for use by a college. Supported Student Profiles, Projects, Online Timed MCQ Test Paper Setting (for Professors) and Test Taking (for Students), etc.
 - Won **First Prize at Praxis 2006 Web Applications contest.**
 - Platform/Scripting Language: PHP (Apache on Windows)

- **Praxis 2006 Website** **(Aug-Sep 2006)**
 - The website was indeed, a content management system. CSS was used extensively, as the design had to be capable of being a container for non-native content.
 - Platform/Scripting Language: PHP (Unix Server)
 - Project Link: <http://praxis.vesit.org/2006/>

- **Autonomous Robots for Robocon 2006** **(Jan-Feb 2006)**
 - Two completely autonomous robots for performing tasks like white line following, lifting and placing blocks, etc. AVR microcontrollers were used and WinAVR was used for coding in Embedded C. An array of OPT 101 optical sensors was used for white line detection. An involved code was developed for path correction.
 - **Quarter Finalist at Robocon India 2006.**
 - Project Link : <http://raid.vesit.edu/>

STUDY PAPERS AND ARTICLES

- **Software Architecture for a Pervasive Computing Environment** **(Aug 2007)**
 - General Issues and Layered Architecture of Pervasive Computing System were discussed. 'Aura', the P.C. System at CMU was taken up as case study.
 - A possible architecture of the **context awareness layer** was discussed in detail as not much work has been done in the upper layers.
 - Submitted to 'K. Shankar Paper Contest' organized by IEEE Bombay Section. Result Awaited.

- **Advertising in a Pervasive Computing Environment** **(Aug 2007)**
 - As Pervasive Computing Environments will deal with users at an even more intimate level than the web, such environments will be even better advertising platforms. The possibilities and issues related to Pervasive Advertising were examined.
 - Submitted to 'K. Shankar Project Idea Contest' organized by IEEE Bombay Section. Result Awaited.

- **Audio Compression Algorithm employed by an MP3 Encoder** **(Jan 2006)**
 - A detailed study paper on the compression algorithm
 - **Finalist** at the Student Paper Contest held by Student Forum for Electronics at V. E. S. Institute of Technology.

- **Blu-Ray Discs – The Third in the Disc Trilogy** **(Oct 2005)**
 - An article on 'Blu-Ray Discs'.
 - **Published in 'Random Thoughts'**, a quarterly by the Computer Society of India (CSI) VESIT Chapter.

SEMINARS & WORKSHOPS

Delivered **Seminars** on

- Robotics and Embedded Systems
- Graphics using C/C++

and took **Workshops** in

- Web Development (Basic and Advanced)
- Robosoccer

for the members of IEEE VESIT Student Branch.

POSTS, BOARDS, COUNCILS & MEMBERSHIPS

- **Network Administrator** (since 2006)
Vivekanand Education Society's Institute of Technology
- **Council Member of IEEE VESIT Student Branch** as:
Web Developer (for 2006-07)
Chief Operations Officer & Chief Web Developer (for 2007-08)
- **IEEE** Student Member (since 2005)
- **Computer Society** (IEEE) Student Member (since 2006)
- **ACM** Student Member (since 2007)
- **Computer Society Of India** Student Member (since 2005)
- Students' Forum for Mathematics & Computation (VESIT) - Member (since 2005)
- Students' Forum for Electronics (VESIT) - Member (since 2005)
- The Debating Society (VESIT) - Member (since 2005)

OTHER AWARDS & SCHOLARSHIPS

- **State Rank 21** in Maharashtra Talent Search Exam. **Awarded Scholarship.**
- **State Rank 25** in Maharashtra State High School Scholarship Exam. **Awarded Scholarship.**
- **Silver Medal (twice)** in Dr. Homi Bhabha Young Scientist Exam
- Made it to the 'Center Top 10' in Physics Olympiad in 2003. Received Certificate of Merit.