Ishan Misra	Résumé

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Date of Birth: 26th November, 1990

Objective

To apply knowledge from the field of computer science, in order to develop and support new technologies or products.
I find thrill in taking on new real world problems and solving them. I wish to be part of _industry oriented research_.

Education

Degree	Institute	Stream/Board	Year	Performance
BTech(3rd Year)	International Institute Of Information Technology, Hyderabad	Computer Science Engineering	2008-10	CGPA : 9.73/10
Senior Secondary	Fergusson Junior College, Pune	Science (Maharashtra State Board)	2008	Percentage: 92.33%
Secondary	Bharatiya Vidya Bhavan, Pune	Maharashtra State Board	2006	Percentage: 91.73%

Areas Of Interest

- Computer Vision and Graphics
- Parallel Programming and Distributed Computing
- Web Technologies and their applications
- Systems - Operating Systems (Network, Security, Concurrency areas, Virtualization), developing scalable systems.

Academic Achievements

- Awarded **Dean's Merit List for Excellence in Academics** (year 2008-09 and 2009-10).
- **Institute Rank 3** (out of 157) Scored a **perfect SGPA of 10/10 in three semesters**
- **All India Rank 765** in the All India Engineering Entrance Examination (**AIEEE**) 2008 (7**90,000 candidates)**
- Selected for the **Indian National Chemistry Olympiad** (InChO) 2008.
- Awarded **National Talent Search Scholarship** (NTSE) 2006 (given by NCERT India to 1000 students).

Current Work

- **BTech Honours in Visual Information Technology**: Undergraduate Honours student under Dr. P.J. Narayanan (Dean, Research) at CVIT Department in IIIT-H.
- **Parallel Image Dithering:** Developing parallel algorithms in OpenCL/CUDA for Image Dithering (have finished an implementation in OpenMP).

Work Experience

- **Internship at _Fortuity Infotech_ :** Worked on distributed databases. (May 2010)
- **Research Assistant (RA):** RA for Virtual Labs (a project under **_Govt. Of India_**) under Dr. Choppella. The aim is to provide **a distributed development and collaboration platform** for labs across India to host **virtual learning environments**. (Aug-Dec 2010)
- **System Administrator:** Server management and virtual machines administration at IIIT-H. (Oct 2010-Present)

Major Projects

Project Title	Distributed 3-D Rendering on Cloud	**Nov-December 2010**
Faculty Advisor	Dr. Vasudeva Verma	
Technologies used	Apache Hadoop – map-reduce framework, JoGL (Java OpenGL)	
Description	Rendering was done by distributing primitives to map tasks and the final data aggregated by Z-buffering on reduce task. _The approach was thought of by ourselves_.	

Project Title	Engine for HDR Image Display using image dithering	**May 2010**
Faculty Advisor	Dr. P.J. Narayanan (Professor and Dean(Research) at IIIT-H)	
Description	The engine developed could take as input any flexible schemes (spatial, temporal, spatio-temporal) to display HDR (30-bit) on 24-bit display.	

Project Title	Internship at _Fortuity Infotech_	**May-July 2010**
Reference	Mr. Yaswanth Narvaneni (yaswanth@gmail.com)	
Technologies used	PHP (Zend Framework and Doctrine ORM), SQL, Python, MySQL Sandbox (to simulate	

	distributed database servers), Apache Virtual Hosts
Description	The task was to design database schema and web interface for an online gaming system (involving monetary transactions). It involved using _distributed databases_.

Project Title	New mess management portal	**October – December 2009**
Faculty Advisor	Prof. Shatrunjay Rawat (Systems Associate Professor at IIIT-H)	
Technologies used	PHP, JavaScript, MySQL	
Description	This portal is _operational since 2010_ at IIIT-H for 2000 users of the mess system. It includes an automated accounting/billing system.	

Minor Projects

Project Title	Order Independent Texture Synthesis	**November 2010**
Faculty Advisor	Dr. P.J. Narayanan (Professor and Dean(Research) at IIIT-H)	
Description	Implemented the paper on this topic by Wei and Levoy (2002) and studied various types of _texture synthesis_ methods.	

Project Title	Upload Plug-in for Drupal CMS	**September 2010**
Faculty Advisor	Dr. Venkatesh Choppella (Associate Professor at IIIT-H)	
Description	It allows batch upload of content to Drupal and automatically grants access permissions.	

Project Title	Open-GL like Graphics API Design	**February-March 2010**
Faculty Advisor	Dr. P.J. Narayanan (Professor and Dean(Research) at IIIT-H)	
Description	I developed the _complete graphics pipeline_ starting from Object Reference Coordinates to Screen coordinates through the steps of modelling, viewing, projection and view-port transformations.	

Project Title	Operating Systems Course Project	**September 2009**
Faculty Advisor	Dr. Kamalakar Karlapalem (Professor at IIIT-H)	
Description	Implemented _Memory Management_ i.e. LRU Approximation, Page pre-fetching using Operating Systems Project (OSP2), an OS emulator.	

Project Title	Spell Checker for UTF-8 files	**April 2009**
Faculty Advisor	Dr. Anoop Namboodri (Assistant Professor at IIIT-H)	
Description	I had used the _Damerau-Levenshtein algorithm_ to suggest correct words for a mistake.	

Technical Skill Set

Programming Languages	C(advanced), C++(advanced), Java(advanced), Scheme (moderate)
Parallel Programming	CUDA ,OpenMP
Scripting Languages	Python(advanced), Bash(advanced)
Web Technologies	HTML, CSS, JavaScript, XML, Ajax, PHP(advanced), Web2Py(advanced)
Operating Systems	GNU/Linux, Windows XP/Vista/7, OpenSolaris(basic)
Miscellaneous	MySQL, MongoDB, MATLAB, LaTeX, Gimp, Audacity

Extra Curricular Activities

- Website administrator and part of the **editing** team of Ping , a newsletter in IIIT-H
- **Vocalist** for the college rock band; interested in classical and alternative rock music.
- Awarded the **"Student of the Year"** award by NIE (The Times Of India) and **"Best All Rounder"** in school (2006).
- Adjudged the best speaker during **debate** competitions at school and active in **quizzing at city level.**

Relevant Courses Taken

- Computer Vision, Digital Image Processing, Pattern Recognition, Computer Graphics, Digital Signal Analysis and Application, Artificial Intelligence
- Formal Methods, Algorithms, Principles of Programming Languages
- Computer Networks, Cloud Computing, Structured System Analysis and Design: Software Engineering Approach
- Complex Analysis, Vector Spaces, Numerical Analysis, Jeevan Vidhya (A week long course to realize life and self)

Declaration

I hereby declare that the above information is true to the best of my knowledge.

January 2011