



Bhanu Kiran P.
Computer Science & Engineering
Indian Institute of Technology, Bombay
Specialization: Computer Science & Engineering

10305064
M.Tech.
Male
DOB: 21/12/1987

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2012	7.15
Undergraduate Specialization: Computer Science & Engineering				
Graduation	BITS Pilani, Rajasthan	BITS Pilani, Pilani Campus	2009	6.09
Intermediate/+2	BIE, Andhra Pradesh	Narayana Junior College	2005	92.20
Matriculation	BSE, Andhra Pradesh	Ratnam High School	2003	87.67

Work Experience

- **Project Trainee** at *Infospectrum India Pvt. Ltd., Nagpur*, July '09 - December '09
(Part of the *Practice School* program of BITS-Pilani)
 - Developed a Java application for real-time motion detection using an IP camera and saving relevant images to database.
 - Developed a Java EE web application (with LDAP authentication support) for viewing stored motion events in an organized manner.
 - The web application uses both client-side and server-side caching to save bandwidth.
 - Technologies used: *JSPs, Servlets, MS-SQL, AJAX*

Academic Record

- **All India Rank 123** in GATE (Graduate Aptitude Test in Engineering) - 2010
- **Birla Institute of Technology & Science, Pilani, Rajasthan**, 2005 - 2009
B.E.(Hons.) Computer Science & Engineering
 - CGPA: 6.09 / 10.0
 - Electives: *Parallel Computing, Advanced Algorithms & Complexity, Data Storage Technologies*
- **Narayana Junior College, Tirupati, Andhra Pradesh**, 2003 - 2005
Standard XII, Marks: 92.2%
 - Subjects: *Maths, Physics, Chemistry*
- **Ratnam High School, Nellore, Andhra Pradesh**, 2002 - 2003
Standard X, Marks: 87.7%

Major Projects, Workshops and Seminars

- **Data stream algorithms and their computational complexities**
(*M.Tech Thesis*, Advisor: Prof. Nutan Limaye, June '11 - present)
- **Maximum Likelihood Formulation for Genome Assembly Problem**
(*M.Tech Seminar*, Guide: Prof. Abhiram Ranade, January '11 - May '11)
- Participant in **Workshop on Graphs and Geometric algorithms, 2009**
(Jointly organized by BITS and TIFR, January '09)
- Won second prize for the **Intelligent Disk Partitioner** project
Cyberfiesta 2008, BITS Pilani

Course Work & Assignments

- **Design & Implementation of Functional Programming Languages**
 - Haskell language, Lambda calculus, Compilation of Functional Language programs
 - Team Project: Developing Haskell clones for 20 UNIX text utilities
- **Software Lab**
 - Python, LaTeX, PHP, Javascript, awk, sed, slidy
 - Project: A remote command execution daemon that can be controlled through mails
 - Team Project: An online lecture delivery system in python with live audio support

- **Design and Implementation of GNU Compiler Generation Framework**
 - GCC source organization, Retargetability, Machine descriptions, GCC plugin development
 - Team Project: Dynamic retranslation of object code
- **Algorithms and Complexity**
 - Reduction, Randomized algorithms, NP-Completeness
- **Applied Algorithms**
 - Classes of graphs, Hardness of problems in various graph classes
- **Combinatorics**
 - Families of sets, Ramsey Theory, Probabilistic method
- **Approximation Algorithms**
 - Primal-Dual method, Iterative rounding, Randomized rounding, Complexity bounds
- **Network Security and Cryptography(ongoing)**
 - DES and RSA encryption, ElGamal encryption, Cryptographic hashing, MAC, Digital signatures, Web security, Wireless security, common attacks

Technical Skills

- **Programming Languages:** C (ANSI C & POSIX), Haskell, Java
- **Libraries/APIs:** Qt, GTK
- **Web:** PHP, Javascript, AJAX
- **Scripting Languages:** Python, perl, sed, awk, bash
- **Other Languages:** x86 Assembly, Verilog HDL
- **Operating Systems:** Linux, FreeBSD, Windows
- **Database:** SQLite, MySQL
- **Tools & IDEs used:** GNU toolchain, NASM assembler, Eclipse, NetBeans

Teaching Assistantship

- **System administration** (Spring 2011, Autumn 2010):
Maintenance of machines in 2 labs that are used by all CSE staff and students
- **Training new system administrators** (Autumn 2011)

Other Activities, Interests and Achievements

- Making improvements to FOSS applications
- Solving maths puzzles
- Listening to Rock and Instrumental music
- Won prizes in school level competitions for writing and speaking.
- Won second prize in the **XtremeMath 2006** Mathematics competition at BITS Pilani.
- **Sports:** Cricket, Chess, Table Tennis