Prakhar Banga

Education:

College:
Third Year Undergraduate Student,
Computer Science and Engineering, IIT Kanpur.
CGPA(after 5 semesters): **9.11**/10.00 (3.65/4.00).
Expected Graduation: 2014.

Precollege:
10th Board(CBSE): 86%
12th Board(ISC): 88.5%

Academic Achievements:
All India Rank **345** in IIT-JEE 2009(about **0.4 million** applicants)
All India Rank **76** in AIEEE 2009(about **1.1 million** applicants)
State(UP) Rank **17** in UPTU-SEE 2009(about **0.3 million** applicants)
State Rank **3** in Regional Mathematics Olympiad 2008

Areas of Academic interest:

Software Engineering, OOP, Programming languages, Program Analysis

Relevant Projects:

◆ **Functional Programming**: Designed a graphics library in **Haskell** for creating SVG(Scalable Vector Graphics) images(Completed November 2011).

◆ **Operating Systems**: Involved extending Nachos(**C++**) by implementing OS features such as multi-programming, system calls like fork/exec, shared memory, demand-paging and semaphores(Completed November 2011).

◆ **Computer Networks**: Involved developing a database server that stores and provides categorized URLs, and developing a Chrome plug-in that fetches URLs from it and uses them to fetch and display RSS Feeds(Completed November 2011).

◆ **Iris Recognition**: Involved developing an efficient and accurate image processing algorithm(implemented in MATLAB and C) to find the best match for a given image of an iris from a provided set of sample images. Accuracy achieved > 98% (Completed May 2010).

Work Experience:

Software Engineering Intern at Aurus Network Infotech Pvt. Ltd., Bhopal(May-July 2011):

- ◆ Developed from scratch(in a team of 3) a Content Management Application for **Android** devices which included designing the user interface, implementing encryption/decryption(Triple DES) and database operations. The project involved working with the Android SDK/NDK. Worked with Java, C and SQLite.

- ◆ Developed a component(individually) for the Aurus Video Client in **Flex** using Adobe Flash Builder including user interface, database operations and integration with the Video Client. Worked with ActionScript 3.0, MXML, MySQL/PHP.

Relevant Courses(those marked * will be completed by April/May 2012):

Discrete Mathematics	Introduction to Computer Organization
Programming Tools and Techniques	Fundamentals of Computing
Data Structures and Algorithms	Probability and Statistics
Operating Systems	Computer Networks
Functional Programming	Introduction to Mathematical Logic
Theory of Computation	Principles of Programming Languages
Principles of Compiler Design*	Algorithms-II*
Principles of Database Systems*	Artificial Intelligence*
Program Analysis, Verification and Testing*	

Secured 10 'A' grades in the 12 completed courses specified above.

Relevant Technical Knowledge:

General-purpose programming: C/C++, Java, Haskell, Ruby, Smalltalk, Erlang, PHP. Other: ActionScript, JavaScript, XHTML, CSS, SQL, MATLAB, git, darcs, SVN.

Contact Information:

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