Arpit Bhayani

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Education and Academic Qualifications			
Year	Degree / Examination	University / Board	CGPA/%
2015	M.Tech (Computer Science and Engineering)	International Institute of Information Technology - Hyderabad	9.03/10
2012	B.Tech (Information Technology)	College of Engineering, Pune – Pune University	8.56/10
2008	Class XII	Maharashtra Board	94.83 %

Work Experience

July'15 - Present: Member Technical at D. E. Shaw. India Software Pvt. Ltd   **(ongoing)**

July'14 - May'15: Teaching Assistant @ IIIT Hyderabad   **(5 months)**
Teaching assistant for course CSE603 - Advanced Problem Solving
Teaching assistant for course CSE563 - Internals of Application Servers

July'12 - July'13: Software Associate at Saba Software Pvt. Ltd., Pune   **(12 months)**
Head developer of Offline reviews feature and Language Check feature of Saba's SPC product at Saba Software Pvt. Ltd.
Roles: Java API design and development, performance improvement, refactoring and database design and bug fixing.

June'11 - May'12: Project Trainee at TCS Innovation Labs - Software R&D, TRDDC, Pune   **(11 months)**
Project: "Precise Detection of Uninitialized Variables using Dynamic Analysis - Extending to Aggregate and Vector Types"
Received "Best Project Presentation" award; approach was appreciated and acknowledged by elite panel of researchers

Project Work

Cric-align - Aligning Cricket Match Reports to Cricket Match Commentaries [Java]
Aligns events mentioned in a Cricket match report to the Balls and Overs being referred in an ESPNCricinfo.com dataset.
Devised a machine-learning based approach to detect prime events from match report, and link them to Balls and Overs.

Imofy - Object recognition in Images for CIFAR-10 dataset [MATLAB and Java]
Classified 60,000 images of size 32x32 into 10 classes based on object present in image with an accuracy of 73%.
Algorithm involved a hybrid approach using Image Processing and Bag-of-Words model for object recognition.

Precise Detection of Uninitialized Variables using Dynamic Analysis - Extending to Aggregate and Vector Types [C]
Identified memory leak and uninitialized variables defects in C program, with Dynamic analysis approach.
Involved reverse engineering, source modification and dynamic instrumentation of a binary file on Intel architecture.

WikiSe - A search engine build on top of Wikipedia Dump [Java]
Implemented an efficient search over the Wiki dump, and various page ranking algorithms and indexing techniques.
Added a feature of Infobox querying to get instant answer from search engine, instead of traditional 2 click method.

Share.Do - Linking social media on an event-action framework [Web2Py, Python and web technologies]
Devised an action-event framework to enable an end user to share on various social websites by triggering an event on one.
Targeted for Facebook, Twitter and Instagram; but can be easily extended to various others social media.

Hobby Projects –
Gesture based game – Augmented gestures in a PC game by simulating keystrokes using gestures. [MATLAB and Java]
Quizzer - A speech controlled MCQ Quizzing application. [VB.NET, Microsoft Speech SDK]
Wall Tweak - A theme manager for Ubuntu 12.04 with features: automatic wallpaper change, customizing sound, font color.

Position of responsibility and Event Organization

Event Head Code-Junkie - a C programming contest, MindSpark'10, College of Engineering, Pune
Led a team of 7 and developed a scalable MCQ based quizzing software with speech recognition, CoE, Pune.

Event Head AI Wars - an Artificial Intelligence fight, MindSpark'11, College of Engineering, Pune
Led a team of 6 and created a Game Engine for conducting a battle between two AI codes for the game - Checkers.

Honors and Achievements

Earned a place in the Dean's List for academic performance during monsoon 2013, IIIT-Hyderabad.
Received **Best Project Presentation** for Undergrad Project at TCS Innovation Labs, Software R&D, TRDDC Pune.
Ranked **1st** in UNIX Shell Scripting Event in national level annual technical college fest MindSpark'10, College of Engineering, Pune.
Ranked **2nd** in C-programming contest in national level annual college fest MindSpark'11, College of Engineering, Pune.

Technical Skills

Languages: C, C++, Java, Python, Android Development, UNIX Shell Scripting, MATLAB, SQL
Library/Framework/Database: C++ STL, MongoDB, Oracle, Apache POI, Apache FOP, Microsoft Speech SDK, Web2Py
Web Technologies: HTML, CSS, JavaScript, Ajax, JQuery, Jekyll, impress.js