

## EDUCATION

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**Bachelors and Masters in Computer Science and Engineering, Indian Institute of Technology, Delhi, India (2005 - 2010)**

## MASTERS THESIS

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**Context-sensitive Ontology Alignment over Massive Datasets (Aug '09 - May '10)** *Advisor* : Dr. Gil Alterovitz, Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, MA, USA

## RESEARCH EXPERIENCE

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**National Center For Biomedical Ontology, Stanford University, CA, USA (March '10 - May '10)**

Devised and deployed a distributed machine learning algorithm for aligning large ontologies over massive datasets.

**Biomedical Cybernetics Laboratory, Harvard Medical School, Harvard University, MA, USA (Dec'09 - Jan '10)**

Worked on an efficient algorithm for automating knowledge propagation and interpretation over a citation network.

**Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, MA, USA (May '09 - Sep '09)**

Devised and implemented an optimal parallel algorithm for information theoretic restructuring of domain graphs. Also, worked on optimizing program analysis techniques in a directed random testing system.

## INDUSTRIAL EXPERIENCE

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**IBM, India Research Laboratory, Delhi, India (Sep'09 - Dec'09)**

Designed and implemented the centralized layer and authentication protocol for Spoken Web interface for facilitating financial transactions amongst customers and businesses using hand held devices.

**ST Microelectronics, Delhi, India (May '08 - July '08)**

Implemented efficient computer vision algorithms on a system on chip for a major smartphone manufacturer.

**Google, Research and Development, Bangalore, India (March '07 - April '07)**

Worked on the product design of an online code sharing and execution framework. Won an award for presentation of the implemented project in the Google Product Engineering Conclave amongst all international entries.

## PROJECTS

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**dBabel : Programming Language Interoperability in Distributed Computing Environments (Jan '09 - May '09)**

Developed a cross-language interface platform to allow seamless communication between disparate programming languages over various platforms.

**SCLIP : Empowering Real-Time Collaborations Using Social Networks (Jan '09 - May '09)**

Designed a Facebook application for shared execution of method constructs over the dBabel distributed protocol stack.

**Automatic Door Opening System Using a Mobile Communication Device (Aug '08 - Dec '08)**

Designed and implemented an embedded system to allow remote users receive images and video of a visitor on a mobile communication device, predict intending action of guest using a gait-trained learning model and allow manual or automatic entry of the visitor into the premise.

## PUBLICATIONS

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**dBabel : A Cross-Language Interface For Real Time Code Sharing**, won an award for presentation at the Pacific Symposium on Biocomputing, 2009 organized by Stanford University

## TECHNICAL SKILLS

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**Programming Languages** : C, C++, Java, Python, R, Matlab Standard ML, Javascript, HTML, VHDL, Xilinx

**Operating Systems** : Windows, Unix, Solaris, OS X, ARM-Linux, RTOS

## EXTRA CURRICULAR ACTIVITIES

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ESPN Sports Quiz Winner, Playing Lawn Tennis and following ATP circuits, Avid player of Soccer and Table Tennis