

# Sushovan De

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## Objective:

A challenging position in information retrieval and databases.

## Education:

**2008 – 2014:** PhD in Computer Science, advisor: Dr. Subbarao Kambhampati,  
Arizona State University GPA 4.00 / 4.00

**2003 – 2007:** Bachelor of Technology in Electronics & ECE,  
Indian Institute of Technology, Kharagpur CGPA of 8.27 / 10

## Areas of interest:

**Information Retrieval:** Built a system that does unsupervised data cleaning using Bayesian networks and novel error models. This works on both offline and autonomous databases. Implemented a query rewriting scheme to get results from autonomous / web databases.

**Databases:** Created a novel algorithm for mining functional dependencies on probabilistic data.

## Professional Experience:

**Mar 2014 – present: Google Inc.**

Senior Software Engineer in the YouTube team at Google.

**May-Aug 2011: IBM India Research Lab**

Intern: Created algorithm to annotate entities in documents using signals from the across the corpus. Used a linear programming technique to disambiguate entities. A patent was granted for this algorithm (US 9275135 B2).

**July 2007 – July 2008: Microsoft India R&D**

Software design engineer: Designed and developed software in C++ for the Applets and Gadgets group in Windows 7.

**May-July 2006: Yahoo Software Development, India**

Intern: Created a prototype of a new version of Yahoo! Mail that targeted users with relatively older browsers. Achieved an award for exceptional performance.

**Nov 2003 - Dec 2006: Innovations Lab, IIT Kharagpur**

Active member and Group head of the Java group: implemented a solution to digitize the hall libraries. Created software for Training and Placement Cell, IIT Kharagpur.

## Mobile Apps:

- Car Scar: **Awarded national top-10** in the “Big App on Campus” event. This is real-time action-strategy game written in XNA where the player plays against AI to attack an enemy car.
- Robonom: **Featured** on Windows Phone marketplace multiple times. A strategy game where the player has to find the smallest possible program to make a robot pick up all items in the map.
- Phoenix Bus Times: Utility to show upcoming public transport times at a glance
- Quickpaste: Utility to save snippets that can be copied to clipboard in one touch

## Selected Publications:

A full list is on my research page at <http://www.sushovan.de/research>

**Sushovan De**, Yuheng Hu, Yi Chen, Subbarao Kambhampati (2014). BayesWipe: A Multimodal System for Data Cleaning and Consistent Query Answering on Structured BigData. *IEEE BigData*.

Munmun De Choudhury, **Sushovan De** (2014). Mental Health Discourse on reddit: Self-disclosure, Social Support, and Anonymity. *International AAAI Conference on Weblogs and Social Media (ICWSM 2014)*

## Relevant Coursework:

**Graduate:** Information Retrieval, Data Mining, Machine Learning, Theory of computation, Algorithms, Artificial Intelligence, Distributed Operating Systems, Software Engineering.

**Undergraduate:** Computer Architecture and Operating Systems, Soft Computing Tools, VLSI, Digital Communications, Digital Signal Processing, Information Theory and Coding.

## Other Projects:

- Serial Communication Protocol to Ethernet convertor – designed and implemented an embedded microprocessor based system to convert and multiplex serial data to Ethernet.
- H.264 codec development using Cradle MSDP Hardware – integration and implementation of modules to encode video to H.264 format.
- Searching for Music files based on tone signature detection.

## Programming Languages:

- C#, Java, C++ – over 8 years of active coding
- PHP, JSP, SQL and database management HTML and JavaScript

## Awards and Honors:

- Recipient of the National Talent Search Scholarship, NCERT, New Delhi.
- Recipient of the Jagadis Bose National Science Talent Search Scholarship.
- Placed in the National top 1% in National Physics Olympiad and qualified for the national level.
- All India rank 313 in the IIT JEE mains examinations 2003, state rank of 4th in the All India Engineering Entrance Examination 2003, and rank 56 in West Bengal Joint Entrance Exam.