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## Academic Achievements & Awards

- Secured **AIR 1120** in *IIT-JEE 2009*
- Awarded **Kishore Vaigyanik Prothsaan Yojana(KVPY)** 2008 scholarship by *Indian Institute of Science(IISc)*
- Awarded **Institute Technical Special Mention** for **two consecutive years, 2010 and 2011** for contributions to the inter and intra institute technical events
- One of the six students to be awarded the **Gold Medal** at *Homi Bhabha Young Scientists Examination* conducted by Mumbai Science Teacher's Association, from all over Maharashtra
- Ranked among the **Top 6** and among the **Top 30** students to appear for **Indian National Mathematics Olympiad(INMO)** in **2007 and 2008**, respectively from Mumbai
- Ranked among the **Top 300** in **Indian National Astronomy Olympiad (INAO)** in 2006 and 2008 and placed among **Top 1%** in the state
- Ranked among the **Top 250** students in **Indian National Physics Olympiad (INPhO)**, 2009

## Additional Learning

- Pursuing a minor degree in **Remote Sensing and Image Processing** at IIT Bombay
- Pursued Stanford's Online Artificial Intelligence and Machine Learning courses

## Internships & Work Experience

- **SlideShare Inc.** (<http://www.slideshare.net>) New Delhi, India  
*Summer Intern, Software Engineering* *May. 2011 – July. 2011*
  - **SlideShare**, one of the biggest *Ruby on Rails* site in the world serves as platform for SlideShow uploading and viewing online
  - Designed and implemented *Admin* Interface to allow super user actions like delete, suspend, view users and the slideshows
  - Implemented specs (*Behaviour Driven Development(BDD)*) for the Ruby code using **RSpec**
- **SalusHx** (<http://www.salushx.com/>) India  
*Lead Django Developer* *July. 2011 – Ongoing*
  - **SalusHx**, is an Electronic Health Record management based startup with an aim to ease Health Records Management in India by providing Cloud based solutions
  - Currently developing the **API** in **Django** (A **Python** based framework)

## Projects

- **Protein Loop Closure** Chemical Engineering Department, IIT Bombay  
*Guide: Prof. Santosh B. Noronha* *January . 2012 – Ongoing*
  - Developing algorithms to model the loops in Protein structure with given constraints
  - Developing on the existing codebase of Pyrosetta to create the protein geometry alongside given constraints
  - The algorithm on implementation would ensure enhanced drug delivery
- **Scilab on Cloud** Chemical Engineering Department, IIT Bombay  
*Guide: Prof. Kannan Moudagalya* *September . 2011 – December 2011*
  - Working on a *Python* based solution for porting *Scilab* on Cloud, thus developing a solution for running Scilab codes on the browser
  - Implemented changes in **SAGE**, open-source mathematics software system to allow plotting graphs through browser online for the Scilab module
- **KICAD-ngspice Interpreter** Chemical Engineering Department, IIT Bombay  
*Guide: Prof. Kannan Moudagalya* *July. 2011 – September, 2011*

- Implemented Python Code to convert KICAD generated netlist to ngspice friendly format, the original netlist could not be exported directly to ngspice due to improper node configurations
- Hosted at <http://github.com/saketkc/kicad-ngspice>

## • IIT Bombay Grading System on SMS

Prof. Madhu Belur

### • Course Project

October. 2011 – December . 2011

- Developed a Flask <http://flask.pocoo.org/> based app to query the IITB database servers
- Used the txtweb <http://www.txweb.com> API to receive queries on SMS and send back the fetched grades from the IITB servers
- This app is being used on a daily basis by the students to obtain their grades on SMS

## • Pratham, Student Satellite Programme IIT Bombay

IIT Bombay

### • Student Project

May. 2010 – October. 2010

- Pratham is an interdisciplinary programme aiming to build a cubesat, to measure the Total Electron Count in the atmosphere
- Served as Member of 'On Board Computer' Subsystem and Incharge of its hardware
- Implemented *Analog to Digital conversion (ADC)* code using ATMEGA32 microcontroller for the 'Communication' subsystem to convert incoming voltage values to *Total Electron Count* values

## • DropBox on SMS(<http://www.dropboxonsms.herokuapp.com>)

YAHOO! Open Hack India

### • Student Hacker

July 2011

- Participated in Open Hack India as a student hacker and developed a **Sinatra(Ruby based framework)** based app using **MongoDB** at the backend
- The hack was shortlisted among the **Top 50** hacks from around 150 hacks from **all over India**
- **The app implements emailing a file in user's dropbox folder to a specified user by using the DropBox and TxTWeb API**

## • GigBook, a Facebook App

YAHOO! HACKU IIT Bombay

### • Students Hackers, Team of 3

October 2010

- Developed a Facebook App to fetch the Music Related Likes of a user from his Facebook account using YQL and last.fm API
- The upcoming concerts of the users favourite band can be mapped on Yahoo Maps thus enabling a visual picture of all concert locations

## • Pivotal Tracker Email Wrapper

Open Source Contribution to Pivotal Labs

### • (<https://github.com/saketkc/pivotal-tracker-email-wrapper>)

July 2011

- Pivotal Tracker is an online agile project management tool
- This is now an **Official Third Party Tool** featured by Pivotal Labs at : <http://www.pivotaltracker.com/help/thirdpartytools>

## • Open GPS Mapper

IIT Bombay

### • Web And Coding Club Summer Project, IIT Bombay

May. 2010 – June 2010

- Wrote a GUI in Perl using Tk Library to establish communication between the computer and handheld GPS device. The hex data was converted to its ascii counterpart and stored in a file

## Extra Curricular Activities

- **Regular Open Source Contributor** of patches for Ruby and Python based Projects : <http://home.iitb.ac.in/~saket.kumar/bugsandpatches.html>
- Secured 2<sup>nd</sup> position in **Microsoft Coding Competition(C/C++)** and 3<sup>rd</sup> position in logic games(Microsoft Coding Arena) at **Techfest 2011 and 2010 both**, the technical festival of IIT Bombay

## Positions of Responsibility

- **Internship Coordinator**, *Practical Training Cell(2011-12)* , IIT Bombay :
  - work involves initiating Company & University Interaction
- **Teaching Assistant** for Computer Programming & Utilisation Course, Autumn 2011(IIT Bombay)
  - Involved in **mentoring** students for Lab Sessions and Projects assist in conduct of examination and evaluation
- **Core Group Member of TechniC**, the Technical Club of IIT Bombay
  - **Organised** technical events inside the institute along with nine other members
  - **Mentored** students for technical activities

## Skills

Languages: C, C++, Java, Ruby, Python, Haskell, Perl

Packages: BioRuby/BioPython,PyRosetta,Scilab, SAGE, kiCAD, ngspice, L<sup>A</sup>T<sub>E</sub>X