

# Prateek Agarwal

Ruby ☆ Python ☆ Git ☆ Cartooning

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🌐 <http://prat0318.github.io>

## 🐙 GitHub Projects

- [prat0318/gitator](#) » Live at [Gitator.com](#).
  - Finds relevant repositories based on an user's GitHub profile.
  - Written in Ruby on Sinatra, designed in Bootstrap.
- [prat0318/prat0318.github.io](#) »
  - Static personal page design with CSS and Bootstrap

## 🛠️ Technical skills

- Programming Languages: [Ruby](#) [Python](#) [Java](#) [C++](#) [Javascript](#) [PHP](#)
- Web Frameworks: [Sinatra](#) [Django](#) [Rails](#) [Apache](#)
- Databases: [MySQL](#) [PostgreSQL](#) [IBM Informix](#) [IBM DB2](#)

## 📖 Education

Degree	Major	Institution	Year of Graduation	GPA
Master of Science	Computer Science	University of Texas at Austin	2015	3.33/4
Bachelor of Technology (Hons.)	Computer Science	Indian Institute of Technology, Kharagpur (IN)	2009	8.91/10

## 🏆 Academic Achievements

- Was among the top 5% in the institute merit list of the undergraduate batch at IIT Kharagpur.
- Secured 383rd Rank in IIT-JEE 2005, an exam conducted by Indian Institute of Technology(s).

## 💼 Professional Experience

- Graduate Research Assistant at CTR, UT Austin (Sept. 2013 – Jan. 2014)
  - Developed a common web interface [www.unitydatabase.com](#) to search through different datasets and output aggregate results and ensuring easy pluggability of new datasets.
  - Technologies got to work on: [Python](#) [Django](#) [South](#) [PostgreSQL](#)
- SDE II (Software Development Engineer II) at Flipkart, India (Apr. 2013 – Jul. 2013)
  - Wrote a ruby gem *Morsel* to traverse through active record trees to purge old records.
    - It helped in limiting the production database size and keeping the data clean.
- Software Development Engineer at Flipkart, India (Jun. 2011 – Mar. 2013)
  - Was part of a team which developed the warehouse module in RoR framework from scratch. It now scales to around 10X as compared to the ERP system existed.
  - Designed warehouse stock snapshots and stock ledger framework using Pig scripts to make the supply chain system legally compliant.

◦ Technologies got to work on: **Ruby** **Java** **Pig** **Active Records** **MySQL**

- Software Engineer at IBM Software Labs, India (Jul. 2009 – Jun. 2011)
  - Handled high priority issues for JDBC client driver for IBM Informix database.
  - Developed performance tests for pureQuery Hibernate accelerator's binding and static features and showcased its improvements over traditional DB2 JDBC driver.
  - Was awarded Smart CADian award for resolving an obscure deadlock situation, making Informix JDBC driver more robust.
  - Technologies got to work on: **Java** **IBM Informix** **IBM DB2**

## ⚙ Other Personal Projects

- Developed gurukools.com<sub>(offline now)</sub> to connect alumni and current students of a campus.
  - Basic framework was a privately hosted IRC daemon to which a client connects through a web login. The motivation was to design a web interface which abstracts IRC technicalities from the user.
  - Learned about mail servers, COMET, long polling, trusted connections during development.
  - Wrote couple of bots in Tcl scripting language for channel moderation and word games.
  - Technologies got to work on: **PHP** **JavaScript** **MySQL** **Eggdrop**
- Designed product *Omerta*, a multi-user chat room application in j2me using Sun Wireless Toolkit platform.
  - Was awarded 1<sup>st</sup> position for the product in **Envision**, Product Innovation Contest, IIT KGP.
  - Was awarded 1<sup>st</sup> position for the product in Javawise, J2ME s/w Development Contest at IIT Kharagpur, 2008 and 2009 continuously.

## 📖 Graduate Courses Taken

Distributed Computing

Feature Oriented Programming

Multicore Programming

## ✍ Research Experience

- Undergraduate project at Sanyog Lab, IIT Kharagpur (Jul. 2008 – May 2009)
  - Designing and Formal modelling of embedded systems for project Sanyog.
  - Skills Developed: Low level system design, theorem verification using Prolog and Coq
- Summer Intern at Network Systems Lab, IIT Kharagpur (May 2008 – Jun. 2008)
  - Design and simulation of currently published Pull-based Freshness Schemes in C++.
- Summer Intern at Telemedicine Lab, IIT Kharagpur (May 2007 – Jun. 2007)
  - Web based medical image browsing and annotation tools for PDA devices in .NET platform.

## 🎵 Extra Curricular Awards

- Was awarded 2<sup>nd</sup> position in Bionetics, Coding Event, Genesis 09 at IIT Kharagpur.
- Microsoft Student Partner of IIT Kharagpur from the period July 08 – June 09.