

Prateek Agarwal

Ruby ★ Python ★ Git ★ Cartooning

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🌐 <http://prat0318.github.io>

🐙 GitHub Projects

- **prat0318/2048-tetris** » Live at **2048-tetris.com**
 - Wrote a Tetris variant of 2048 game, 1M+ unique visits
 - Made it to the front page of Hacker News for a day(~150 pts), mentioned in TechCrunch.
- **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/json_resume** » Create pretty resumes from json format to .html, .md, etc.
 - Static personal page and resume design using Mustache.
 - Current resume is generated using json_resume.

🛠️ 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	Graduation Year	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](#)_(offline now) 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 1st position for the product in **Envision**, Product Innovation Contest, IIT KGP.
 - Was awarded 1st 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	Database Systems
Engineering Programming Languages	Introduction to Mathematical Logic

✍ 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 2nd position in Bionetics, Coding Event, Genesis 09 at IIT Kharagpur.
- Microsoft Student Partner of IIT Kharagpur from the period July 08 – June 09.