Prateek Agarwal

Ruby ☆ Python ☆ Git ☆ Cartooning

✉ prat0318 @ cs.utexas.edu
📞 +1 (512) 698-3649
🌐 **http://prat0318.github.io**

Qualification Summary

- Competent at managing responsibilities in a high-volume atmosphere
- Hard worker, quick learner, and ability to assume responsibility

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.
- **prat0318/json_resume** » Convert JSON data to pretty resumes in .html, .tex, .md
  - 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 Insitute 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 **http://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.
    - 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

- 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.

📄 Patents

- US Patent 5,146,634 **Three zone bed cover with an inflatable human form.** ,issued September 15, 1992.

☑ Publications

- Michael Douglas, Marcelo Disconzi **On the boundedness of ective potentials arising from string compactifications,** arXiv: 1206.1885, June 2012.

🌐 Memberships

- Member of the American Mathematical Society, 2008-present

🎵 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.