

# Prateek Agarwal

☎ +1 (512) 698-3649  
✉ prat0318 @ cs.utexas.edu  
🌐 prat0318.com  
🌐 prat0318  
🌐 prat0318

---

## TECHNICAL SKILLS

- **Programming Languages:** Python, Java, Ruby, C++, Javascript
- **Datastores:** Cassandra, ElasticSearch, Zookeeper, MySQL

---

## GITHUB PROJECTS

- **prat0318/json\_resume** - Details at [prat0318.com/json\\_resume](http://prat0318.com/json_resume)
  - Ruby library to generate resume from JSON to HTML, pdf, md, tex formats.
  - Around 1K stars on Github. Front page of Hacker News
  - Current resume has been generated using json\_resume.
- **prat0318/2048-tetris** - Live at [prat0318.com/2048-tetris](http://prat0318.com/2048-tetris)
  - Wrote a Tetris variant of 2048 game, 1M+ unique visits
  - Front page of Hacker News, mentioned in TechCrunch.
- **Yelp/pyramid\_zipkin** - Zipkin integration with Pythonic services.
  - Built pyramid\_zipkin as a wrapper to bind Pyramid based services with Zipkin.
  - Also wrote swagger\_zipkin as a zipkin decorator over swagger clients.
  - Authored an engineering blog post: [Distributed Tracing at Yelp](#).
- **Major contributor to swagger packages** - swagger-py, bravado, pyramid-swagger
  - Wrote swagger-py as part of my internship at Yelp - currently used in production.

---

## PROFESSIONAL EXPERIENCE

- Jan, 2015 - **Software Engineer, Yelp, Inc.**, San Francisco.  
Current
  - Part of the **distributed systems** Infrastructure team.
  - Maintain and provide tooling around NoSQL datastores - **Cassandra, ElasticSearch**.
  - Help other teams to decide which datastore will best suit their needs.
  - Built **Zipkin** (Distributed tracing) infrastructure at Yelp to debug service latencies.
  - Wrote **pyramid\_zipkin, swagger\_zipkin** packages to easily integrate Zipkin with existing services.
  - Co-authored **bravado** package to integrate python services with Swagger v2.0 specifications.
- Jan-May '15 **Graduate Research Assistant, Texas Advanced Computing Center, UT Austin.**  
[part-time]
  - Added docker integration to web portal [digitalrocksportal.org](http://digitalrocksportal.org) to streamline the deployment process.
  - Technologies got to work on: Python, Django, Docker, Docker-compose, Celery
- May, 2014 - **Software Engineer Intern, Yelp, Inc.**, San Francisco.  
Aug, 2014
  - Wrote **swagger-py** to build a dynamic client library for services using swagger v1.2 specifications.
  - Technologies got to work on: Python, Swagger v1.2, twisted
- Jun. 2011 - **Software Development Engineer II, Flipkart, India.**  
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.
  - Was part of the Supply chain team which remodelled and built a new one from scratch. It now scales to around 10X compared to the older system.
  - Technologies got to work on: Ruby, Java, Pig, Active Records, MySQL
- Jul. 2009 - **Software Engineer, IBM Software Labs, India.**  
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

---

## TALKS/BLOG POSTS

- OpenZipkin/Distributed Tracing Conf [SF, July 2016] : How Zipkin works @ Yelp
- Engineering Blog Post [Mar. 2016] : Distributed Tracing at Yelp

---

## EDUCATION

- 2015 **Master of Science, Computer Science**, *University of Texas at Austin*, GPA: 3.73/4.
- 2009 **Bachelor of Technology (Hons.), Computer Science**, *Indian Institute of Technology, Kharagpur (IN)*, GPA: 8.91/10.

---

## GRADUATE COURSES TAKEN

- Distributed Computing
- Multicore Programming
- Advanced Operating Systems
- Engineering Programming Language

---

## 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).

---

## RESEARCH EXPERIENCE

- Jul. 2008 - **Undergraduate project**, *Sanyog Lab, IIT Kharagpur*.
- May 2009 ◦ Designing and Formal modelling of embedded systems for project Sanyog.  
◦ Skills Developed: Low level system design, theorem verification using Prolog and Coq
- May 2008 - **Summer Intern**, *Network Systems Lab, IIT Kharagpur*.
- Jun. 2008 ◦ Design and simulation of currently published Pull-based Freshness Schemes in C++.

---

## EXTRA CURRICULAR AWARDS

- 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.
- 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.