

Harsh Pankaj Panchal

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Master of Engineering in Computer Science, **GPA: 3.93/4.00**

Aug 2012 – May 2013

University of Mumbai, Sardar Patel Institute of Technology, Mumbai, India
Bachelor of Engineering in Computer Science, **GPA: 3.98 /4.00**

Jun 2008 – May 2012

TECHNICAL SKILLS

Languages: Hack / PHP, Go, Scala, Python, Java

Datastores: PostgreSQL, DynamoDB, Elasticsearch

Frameworks: Spark, Akka, Play

WORK EXPERIENCE

Software Engineer, Facebook Inc. (Menlo Park, CA)

Mar 2019 - Present

- **Building framework to support privacy enforcement at scale**
 - Working on tagging data sources and propagating relevant metadata across various data pipelines to allow serving of privacy compliant identity data to various internal customers.
- **Modularizing model versioning framework to support identity matching models**
 - Abstracted common transformations across various model versions into config files which were injected into data pipelines, allowing model developers to iterate faster
 - Collaborated across multiple teams to better understand the gaps in the existing framework and provide the support and improvements needed to deliver numerous privacy compliant model versions within a short timeframe

Software Engineer, Thumbtack Inc. (San Francisco, CA)

Nov 2015 - Mar 2019

- **Reducing latency of search results**
 - Reduced e2e p95 latency of the service that searches and ranks professionals using a customer request by 33%.
 - Added relevant monitoring and logging to gain better insight into the slow components in the service.
 - Rearchitected the matching service to parallelize independent I/O calls and optimized datastore performance by reducing the data size by 70% making it more efficient.
- **Aggregating click signal data to use in ranking search results**
 - Built an offline pipeline to extract click signals from relevant events data and made it available for offline analysis and online serving.
 - Built the pipeline using Scala and Spark that generated daily snapshots of engagement signals (views, clicks, contacts) by aggregating millions of events over the past few months.
 - Added monitoring dashboards and alerting to validate the generated data to ensure sanity and to make the data immune to upstream changes.
- **Building Thumbtack's machine learning platform**
 - Built the entire of Thumbtack's machine learning infrastructure from the ground up that went on to support 10+ models in production including regression models, random forest models and boosted trees.
 - Enabled various teams to train, evaluate, serve and monitor their models that powered some of Thumbtack's core product experiences using infrastructure built in Scala and Spark.

Member of Technical Staff, Oracle America Inc. (Redwood Shores, CA)

July 2013 – Nov 2015

- Worked with Oracle's Automatic Storage Management (ASM), which is a volume manager and file system for Oracle's database files, Oracle Exadata storage and Oracle Real Application Clusters.
- **Version compatibility between Oracle RDBMS and ASM**
 - Developed a framework to identify the compatibility between different versions of ASM and RDBMS by checking the information about the various dependent patch-set units applied to both components at startup.