Tushar Babbar
Software Engineer

PROFESSIONAL PROFILE

Software programmer experienced in web development, managing distributed infra and automated deployments. Familiar with PySpark, Rules based insights extractions from reviews, Lucene search engine, distributed message driven applications with Akka/Scala, reverse engineering of undocumented web APIs and penetration testing.

CONTACT

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EXPERIENCE

Flipkart
JANUARY 2018 – PRESENT

Software Engineer II

Reviews text analyser for manufacturing differentiated products

Lead the efforts to improve the performance of a PySpark based text processing engine by 10x. Improved the reliability and predictability of the system using divide and conquer techniques.

Practo
MARCH 2015 TO DECEMBER 2017

Technical Lead

Central Engineering

Central Engineering owns up the systems which have generic use cases like request logging, customer communication, deployment automation etc.

- Implemented Blue Green Deployment flow.
- Implemented Phased deployments with Canary Analysis.
- Whatsapp channel integration for transactional communication to customer.
- Disaster recovery implementation for AWS Infrastructure.

Cerebro - Practo Search

Cerebro is Practo's distributed search platform based on Lucene and Akka which powers autocompleted suggestions and search listings based on Practo Relevance Algorithm

- Improved correctness of data used to evaluate Practo Ranking Algorithm based on historic data of the doctor appointments.
- Enhanced the name search listings using Jaro-Winkler distance and presence/order of exact sub-phrases present in searched strings and matches.

Chronos - Ticketing Tool

Chronos was Practo's in-house ticket management tool built on Flask and AngularJS which enabled customizable workflows, team collaborations and timely resolutions for tickets.

- Designed a customizable system to add/modify/remove system rules as the process changes.
- Implemented a ticket distributor based on workload of the agent to incentivise the process of ticket resolution.
- Implemented customisable multi-level escalation policies within teams to ensure timely

resolution of tickets by alerting managers about tickets getting stagnated.
- Implemented real-time notifications, reminders and shortcuts to decrease time spent per ticket curation.

InoxApps Mobile Solutions & Frankly.me

Software Developer

Frankly.me

Frankly.me is a social platform in which users can interact with social figures, field experts and celebrities with text questions and video answers.

- Designed the architecture for the REST API and deployed it on Amazon AWS.
- Designed asynchronous push notifications module for android app users using GCM (Google Cloud Messenger), Celery and Crontab.
- Created an in-house task scheduler to post tweets randomly over a time interval. Used Redis, Crontab and Python-Twitter.
- Developed user interest classifier using Wikipedia page categories. Used Python-Wikipedia module and DBpedia API.
- Created email tracking system to track opened emails and click through rates.

Android Automation Testing Platform (POC)

- Created an environment for automated Android testing on different Android builds using AndroVM (now Genymotion), MonkeyRunner (Jython based Android testing tool), Virtual Box, Python scripting and Amazon EC2 Windows instances.
- Automated the process of spawning and killing EC2 instances on Amazon AWS with Boto (Python interface for AWS) and Amazon EC2 Spot instances which reduced the cost of the system by 5 times.
- Created API based system to control and monitor the working of the testing environment.

REST API Development for Android Apps

- Created Backend API for PhotoDiscoveryApp based on Sinatra, Thin and Sidekiq that interacted with public API of Instagram, Smugmug, EyeEM and Flickr.
- Created a long polling enabled server with Sinatra-Async for CamChatFB app. Also hosted an RTMP server based on open source Nginx plugin.

PUBLICATIONS

TCP-over-UDP for Real Time Applications

http://goo.gl/8xw1cr

The draft proposed development of a Real Time Application protocol, based on both TCP and UDP, that provides effective, loss less yet fast communication.

EDUCATION

Indraprastha Engineering College

Bachelor of Technology in Computer Science and Engineering

- Member of the NASSCOM Industry-Academic Connect programme.
- Ranked 3rd in Networking and Ethical Hacking workshop by Nettech.
- Conducted introductory workshop on Ubuntu and Linux Distros for CS and IT departments.