Bharghava Varun Ayada

PERSONAL DATA

       Place: Bangalore, India
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Experience: >7 years
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     Github: https://github.com/abvarun226
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WORK EXPERIENCE

Imgur Inc, Bangalore   July 2018 - Present
Software Engineer - Platform Team

Currently, I'm working with the platform team as a backend engineer. We build APIs and microservices that power the Imgur website and mobile apps. We build these microservices on kubernetes using go-micro (https://micro.mu) and gRPC.

My responsibilities include,

- Develop microservices, that power Imgur website and apps, on kubernetes using Golang
- Manage and improve kubernetes infrastructure
- contribute in architecture, software development and release planning
- address site security issues

Key Projects so far,

- Architected and built view counts service that handles 30k RPS traffic
- Architected and built the new comments service (REST API)
- Integrated distributed tracing in platform microservices (Jaeger)

Programming languages I use:

- Golang, Python

Some of the technologies/services I work on at Imgur:

- AWS, Kubernetes, Git, Redis, RabbitMQ, MariaDB, go-micro, jaeger, scylladb

Imgur Inc, Bangalore   July 2016 - June 2018
Software Engineer - DevOps

Imgur is an image hosting service and work for the DevOps team from Bangalore, India

My responsibilities include,

- developing software to manage Imgur infrastructure, platform and website
- contribute in software development and release planning with the DevOps team
- address site security issues
- build and manage an automated continuous integration and deployment pipeline
- build and manage deployment of Chef infrastructure

Key Projects so far,

- Build Kubernetes cluster for microservices
- GraphicsMagick Integration on dynamic thumbnail generation microservice
- Image uploader - https://github.com/Imgur/mandible
- CI/CD using Buildbot
- Integrated Sentry (https://sentry.io/)
- Maintain and improve Chef recipes (we use Chef everywhere)
- Customized Golang vanity server and Godoc server
- JPEGMini integration for image and thumbnails (image compression)

Some of the technologies/services I work on at Imgur:

- Fastly, AWS, Terraform, Packer, Vault, Consul, NS1, Buildbot, Chef, Ansible, Datadog, Sensu, Kubernetes, Git, Redis, Memcache, RabbitMQ, MariaDB, ELK, HAProxy, Nginx

Programming languages I use:

- Golang, Python, Nodejs

Yahoo Software Development Pvt Ltd, Bangalore   July 2011 - June 2016

Tech Yahoo, Production Engineer

I worked for the Video Platform production engineering team which provided,

- a video transcoding service
- a content delivery network for streaming live and on-demand videos

My responsibilities were:

- build software for the Video Platform Team
- develop automation tools for the team
- performance or service usage related dashboards
- continuous integration and delivery
- system administration and monitoring of servers and applications running on them
- contribute to product architecture and design

Key projects over the 5 years:

- Launching a Hadoop MapReduce based transcoding service
- Usage and performance dashboards for the video transcoding service by crunching data on grid using Hadoop MapReduce
- Flickr May 2013 launch when Yahoo increased storage capacity per user to 1 TB. This increased video transcoding requests by almost 8 times. Had to massively scale infrastructure for this.
- Built a highly scalable and elastic video transcoding platform using the principles of cloud on OpenStack. A paper submitted on this idea was selected for presentation at Yahoo TechPulse 2015 conference in Santa Clara convention center, California
- POC for AWS based video transcoding service. When our in-house transcoding service is about to run out of compute resources, it would automatically switch to AWS based transcoder
- Successfully delivered multiple live-events like the Michael Jackson funeral, the royal wedding, first ever free live stream of NFL game between Buffalo Bills and the Jacksonville Jaguars, and many other live events
- Setup Splunk infrastructure for centralized log collection and indexing on hundreds of servers that hosted the software for Video Transcoding and Content Delivery Network

INTERNSHIPS

Einstasoft, Bangalore   June 2010 - August 2010

Developer Intern

I worked as Developer Intern at GaVista Tech, formerly known as "Einstasoft". I worked on Front End development using CakePHP framework for the website www.legalcrystal.com.

EDUCATION

M.S. Ramaiah Institute of Technology   July 2007 - June 2011

Bachelor of Engineering

Bangalore, India

Major: Computer Science and Engineering

Cumulative GPA: 9.19/10

PUBLICATIONS & CONFERENCES

MapReduce Based Information Retrieval Algorithms for Efficient Ranking of Webpages

International Journal of Information Retrieval Research, IGI Publishing

October 2011

http://dl.acm.org/citation.cfm?id=2439871

In this paper, we discuss the MapReduce implementation of crawler, indexer and ranking algorithms in search engines. A crawler and an indexer in a MapReduce environment are used to improve the speed of crawling and indexing. The proposed ranking algorithm is an iterative method that makes use of the link structure of the Web and is developed using MapReduce framework.

International Conference on Advanced Computing, Networking and Security

ADCONS' 11, National Institute of Technology Karnataka, Surathkal

December 2011

Presented our paper "Efficient Cloud based Information Retrieval algorithms using MapReduce framework" at the conference.

TechPulse - Yahoo's Annual Technical Conference

Yahoo - Santa Clara Convention Center, California, US

December 2015

Employees have an opportunity to submit a technical paper or poster, and if selected, employees get an opportunity to attend the conference in California and present their paper. In December 2015, I presented a technical paper titled "Highly Scalable and Elastic Video Transcoding Platform" at TechPulse in California.

AWARDS & RECOGNITIONS

Excellence Award - My performance in 2015 placed me in top 10% of the company at Yahoo

U Rock Award - For seeing the bigger picture and supporting Flickr "May Launch" successfully in Q2 2013 at Yahoo

SKILLS

Programming Languages: Go, Python, Java

Database/Key-value store: MySQL/Mariadb, Redis, Memcache

Continuous Integration: Jenkins, Buildbot

Configuration Management: Chef, Ansible, Terraform

Monitoring Solutions: Datadog, Sensu, Prometheus

Operating System: Ubuntu, RHEL

Others: Amazon Web Services, Kubernetes, Git, Fastly (varnish), Openstack, Flask, Splunk/ELK