# Rishi Mittal

# Senior Software Engineer

+971-554076273 | rimittal44@gmail.com | LinkedIn | Twitter | Github | Dubai, U.A.E

#### PROFESSIONAL SUMMARY

Software Engineer with experience building infrastructure, products and who believes in automation. Extensive experience working in Engineering teams of Health, Food, Ride Hailing, Payment product based Unicorn startups globally.

Experience working in transitioning monolith architecture to microservices based, SOLID principles, experience in designing complex services and components, understands business strategy, actively seek new ideas, opportunities, methods, trends and actively encourages team to adopt these practices.

#### **TECH STACK**

Back End	Python, PHP, Django, Flask, Lumen, Java, Microservices, APIs, Site Reliability Engineering, DevOps
Infrastructure	AWS, Docker, OpenStack
Data Stores	MySQL, ElasticSearch, MongoDB, Memcached, Cassandra, Redis,
Web Servers	Apache Tomcat, Apache HTTP Server, Nginx

#### **EXPERIENCE**

#### Senior Software Engineer | Careem | Dubai, UAE

18thNov2018 - Present

Careem. Inc, is the MENA region's leading consumer platform, offering products in Ride hailing, food-delivery, deliveryAnything, payments etc. It leverages mobile apps(iOS & Android), to provide seamless customer experience in business verticals. It is delivering +1M food deliveries every month, and more than +8M rides every day. Careem is now part of Uber as a result of \$3.1B deal.

- Features & deployment pipelines for Search & Discovery Service, that indexes all the merchant info & catalogues to ElasticSearch, and api's for listing merchants, sections, collections, search based on tags, cuisines, dishes etc.
- Plan, build, bootstrap Promotions & Offer Service, to create/redeem promotions(user/merchant/bank/city), apis for integrating with loyalty Service, automation of promotions based on order cancellation, marketing campaigns etc.
- System design, features of Merchant & Catalogue Service, which stores merchants information, menus, groups, items, apis to integrate with POS product, schema design etc.
- Scaled platform through orders in early 2k to over 20k orders per day.
- Drove redesign of the consumer-facing app through two iterations improving app-open bounces.
- Design and implementation of the framework to measure service reliability, SLI, error budgets per service, SLAs.
- Scalable Gitlab Setup(master-slave/runners) using cloudformation, with monitoring & alerting, adopted by more than 10 services., Defining modules, contracts to consume for CI/CD adoption.
- Scalable laaS for multiple microservices across 4 different environments, CI/CD setup, using Gitlab, AWS cloudformation (generated using troposphere/python) & automation of deployments/backups in very strict deadlines, Designing modular network architecture, based on resources requirement, adding suggestions for cost

- improvements.
- Proactive monitoring, On call support, leading fire fighting during issues, writing RCA Reports along with responsibility to get the fix delivered.
- Technologies: Lumen, PHP, Python, ElasticSearch, MySQL, Mongo, Nginx, Supervisor, uWSGI, Cloudformation, AWS

#### Senior Engineer/Engineering Lead | Zomato | Gurgaon, India

4thJuly2016 - 15thNov2018

Zomato, is leading food delivery & restaurant discovery company based in India, operating in 23 countries, estimated food deliveries stands at +1M orders per day, and more than +\$1.5B in GMV, +180K delivery fleet.

- Design, plan & implementation of Zomato CodeBase Migration(Php5.5 -> Php7.0), involving automation of server provisioning .
- Improving deployment pipelines, using Ansible, Hipchat(ChatOps) implementation, later on Jenkins. Managing Infrastructure based on AWS(Production & Staging), In-House(OpenStack), responsible for uptime and availability of services.
- Managing terabytes of data sources( Mysql, Cassandra, Solr/Search, Redis, Cache) Infrastructure.
- Customised Stateless servers to run on Spot Instances(Reducing 80% Server cost), partnered with SpotInst.
- Experience around tools like hashicorp Consul, travis, goCD, twemproxy, OpenVPN, mysql-proxy integration,
  SpotInst, sentry, newrelic, jenkins, hipchat deployment integration, percona-toolkit, pagerduty, apache, redis,
  Memcached, Envoy, rotor, gh-ost etc.
- Implementation of Graylog stack, improving Observability across multiple services, real-time dashboards to understand the behaviour of core transaction flows and catch outliers.
- Modular Libraries/Drivers to connect with backend data sources, adding more scalability and consistent connections.
- Introducing & Setup of Envoy based Service Mesh(ECS platform), & successful migration of key services to service mesh.
- Design, build & Maintain Infrastructure for Zomato to support (1M Requests/min) and over +1M transactions/day.
- Planning & Migration of Zomato AWS Infrastructure to popular IAAC(terraform), introducing modular approach to provision infrastructure in multiple environments, improving developer productivity.
- Responsible for planning and execution of migrations related to databases, key-value stores, coordination with multiple technology verticals to implement solution without impacting our customers and merchants.
- Managing 100s of scheduled jobs, workers on production allowing them scale, implementation of solutions like Mesos/Chronos etc.
- Built and led a team of 6 high performing engineers.
- <u>Technologies</u>: AWS, Apache, Solr, Python, Flask, Django, MySQL, Haproxy, Nginx, SRE

#### Software Engineer | Practo Technologies | Bangalore, India

4thJune2015 - 1July2016

Practo Technologies, is leading Health Tech based out of India, operating in 5 countries, provides consumer products (Doctor, Clinic discovery, appointment booking etc.), and B2B products like Practo Ray.

- Design & development of *Practo Hawk (Flask, Python, Mongodb)*, a tool to monitor the business KPIs (appointments, patients added EMR records etc)
- Architecture and development from scratch of *Practo Deplex ( Flask, Python, boto API, Fabric tasks, AWS ),* One click deployment tool, Enabling 40+ deployments/day for more than 50 applications.
- Development of *modules in Practo Eden (Java, kafka, Multithreading)*, API based sharded Database layer which uses custom indexing & asynchronous calls.
- Re architecture of *Practo Accounts (In house Single Sign-on Service written in Flask, Python),* multiple fixes, bugs and enhancements towards OOPS principles.

- Member of Platform team, Involved feature development for multiple projects(real time monitoring of appointments, scheduling and new users etc.), later transitioned to work with Infrastructure team, learning devOps practices, CI/CD, cost optimization of AWS Infrastructure, implementation of security practices.
- Technologies: Python, Flask, Django, MySQL, Mongo, Nginx, uWSGI, AWS

#### Project Engineer | C-DAC | Hyderabad, India

1stFeb2012-8thJune2013

C-DAC established its Hyderabad Centre in the year 1999 to work in Research, Development and Training activities embracing the latest Hardware & Software Technologies. The centre is a Knowledge Centre with the components of Knowledge Creation, Knowledge Dissemination and Knowledge Application to grow in the areas of Research & Development, Training and Business respectively.

- Design & development of *Mentor*, a Content Management Product, implemented using Java, Struts2, Spring, Hibernate, deployed at research Institutions in India.
- Conducted research & proof of concepts on multiple cross-platform mobile development tools like mosync, phonegap.
- Implementation of Eucalyptus Cloud (Private cloud setup).
- Case Study: Leveraging mobile technology for developing tools for Visually Challenged Kids.
- <u>Technologies</u>: Java, Sprint, Hibernate, Mysql

### OTHER EXPERIENCES

Software Engineer Intern | Tech Mentro | India

May2010 - July2010

#### **EDUCATION**

M.Tech (Comp Sc.) | International Institute of Information Technology | Hyderabad, India

July2013 - May2015

- CGPA: 7.5
- Teaching Assistant for Advance Problem Solving, Operating Systems.
- Designing the questions for the advance problem solving course.

PG-Diploma | C-DAC | Hyderabad, India

Sept2011 – Jan2011

• Grade - A

B.Tech (Comp Sc.)| Rajasthan University | Alwar, India

July2007 - July2011

• CGPA: 7.0

## ADDITIONAL PROJECTS

- Index Wiki( Search engine)
- LightWeight -DB Engine
- Internet Of Things(platform to create apps)
- Conversation Analysis over Twitter Data(Intelligent chatter)
- Extracting Yelp Contact data(data extraction & crawling)
- Multithreaded File Server(Distributed File System)