

# Manish Agarwal

manishrocksag@gmail.com | +91 704-369-3447 |

## EDUCATION

**BTech in Information Technology**

June 2014 | Kolkata

Heritage Institute of Technology

Cum. GPA: 7.81 / 10.0

## LINKS

Github:// [manishrocksag](#)

LinkedIn:// [manishrocksag](#)

Website:// [iammanishagarwal](#)

## SKILLS

- Microservices
- Elastic Search
- Distributed Systems
- SQL and NoSQL
- Event Oriented Architecture (Kafka)
- AWS
- Docker
- Python • Golang • NodeJS • Ruby

## EXPERIENCE

**SALT SIDE** | Senior Software Engineer

Oct 2018 - Present | Bengaluru, India

- Developed inhouse image service to replace **Cloudinary**. The service supports all the image operations in the lifecycle of the image. It is highly scalable and receives close to million requests per hour. It helped us in saving thousands of dollars in subscription service. (NodeJS, Libvisp, Sharp, S3, Cloudfare)
- Led the team to build chat service in record time when one of our vendor Layer(Chat Service Provider) suddenly decided to close down its operations. The chat supports all forms of communication between users across cross platform devices. (DynamoDB, WebSocket)
- Developed search for our jobs section with multi filter support. (Elastic Search, MongoDB)
- Developed notification service using firebase to push notifications to mobile clients.
- Implemented door step delivery for our vendors selling products through our portal, which allows them to deliver products directly to their consumers.

**TYPESET** | Software Engineer

Sept 2017 - Oct 2018 | Bengaluru, India

- Developed uploads management workflow which takes image in any format and converts it to png which is later consumed by the rendering pipeline. The system also takes care of optimizing the large image on the fly to save rendering time. (RabbitMQ, Celery, Redis, S3)
- Developed payments system for team pricing which allows researchers to use typeset platform in groups and collaborate on research papers. This turned out to be a major revenue generator for typeset.
- Implemented cloud architecture to minimise cost while having the ability to deliver application in highly available, scalable and manageable environment using AWS. (VPC, Subnets, AZ, EC2, Target Group, ELB, CloudWatch, CloudFront, Route 53). Created alert system to report different metrics through slack channel.

**DOSEPACK** | Software Engineer

June 2014 - Aug 2017 | Oakland, US

- Developed the dosepack software from ground zero which is used by pharmacy to interact with robot and perform operations on it. The interface is a web application built using RESTful architectural style. The application uses Python to define its core modules, peewee as an ORM, cherrypy as application server and MySQL as a database server.
- Optimized the pack generation algorithm. Reduced the time required to generate 100 packs for robot processing by 10x.
- Using K-Means-Clustering developed a recommender system to suggest canister arrangement to users for filling the packs which helps in significantly reducing the robot processing time.
- Migrated the current code base from Python2 to Python3. Worked on converting multithreaded code to asynchronous code using asyncio. Implemented websockets using asyncio.