

# Ankit Singh

Senior Software Engineer • LotusPay

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Bengaluru, India 📍

Full-stack developer skilled with Ruby on Rails, React, Python, and AWS services. [Certified AWS Solution Architect](#) with expertise in designing secure, scalable solutions. Effective communicator, adept at delivering high-quality end-to-end solutions on time.

## PROFESSIONAL EXPERIENCE

Senior Software Developer Engineer

LotusPay



Feb 2020 – Till Now

As the only engineer of the technical department, I curated and implemented a comprehensive tech stack, ensuring its alignment with business goals and overseeing the overall functioning of the department.

### Image Processing Standalone EC2 Instance

- Collaborated with cross-functional teams to analyze user requirements, design technical specifications, and develop a **scalable image processing architecture** that resulted in a reduction of image processing time to **3 sec** and improved the **productivity** of the operations team by **150%**.
- Implemented real-time monitoring and reporting tools to track system performance, resulting in a **90% reduction** in **downtime incidents** and an average **resolution time** of **less than 5 minutes**.

### Payment's Importing System

- Developed a new technique for **importing** all the auto payment data from the bank to the native system leading to **decreasing** in server process time by **15x (MySQL)**.

### Platform Upgrade

- Crafted the **upgrade** process and deployment of the new environments on **AWS Elastic Beanstalk** with zero cost overruns and **zero production downtime** 2 times in a year.
- Implemented **AWS Route53** for **blue green deployment** to avoid downtime during peak hours.
- Managed the requirements gathering processes to **support** the **development** of new and **enhanced** features and functions.
- Identified **performance bottlenecks** through profiling tools and implemented **caching** strategies, reducing server load by 50%, **improving** scalability and **saving** \$10k/yr on hosting costs.
- Initiated customized error messages for each unused REST API request, **reducing customer confusion** and **increasing** overall **satisfaction** by 25%.
- Decreasing the **page load time** from 7s to 1s by implementing **AJAX** call for heavy queries.
- Implemented and developed **VPN protocol** within organizations **VPC** by leveraging AWS VPN services.
- Implemented and expanded a secure **three-stage pipeline** mechanism utilizing **AWS Workspaces**, thereby ensuring that confidential code repositories were never directly accessed, **resulting** in a **60% reduction** in the risk of data leakage.

### AWS Linux Service Scripts

- Designed Linux services to avoid fault deployment to production and robustly handle the ongoing background jobs using **Redis** and **sidekiq** with **REST APIs**
- Developed **serverless functions** to **automate** periodic job processes, **resulting in a 90% reduction** in **human intervention** and **freeing up core servers** for more **critical tasks** using **AWS Lambda**.
- Ran **A/B testing** to figure out which web page leads to max conversions and also developed scripts to perform testing to get hold of critical errors at an earliest

## SKILLS

- Ruby on Rails, Python, C++, JavaScript
- Flask, Shell Scripting
- MySQL, DynamoDB, PostgreSQL
- Redis, Sidekiq, Git, GitHub
- Amazon Web Services
- REST API's
- Docker
- Data Structure and Algorithms

## ACHIEVEMENTS / RECOGNITIONS

- Published manuscript on **Object Detection and Segmentation** in International Scientific Research.
- Won best **Server-Side** project in the country by Udacity.
- Cultivated **public speaking skills**, developed over the course of a four-year by giving tech seminar, speaking at meetups, and college debates.

## PROJECTS

- **Neighborhood Map** - **KnockoutJS** and **Google Map API**
  - This Application helps to find the best places to visit in city using google maps.
- **Blood Bank Web Project** - **Python, Flask, Google OAuth**
  - This Application will help you to enter details and maintain record and do quick analysis of the blood category and send blood the need person quickly.
- Google Assistant App - **Google DialogFlow**
  - Developed three apps in google assistant using DialogFlow **chat bot for introduction, learning python and sports quiz**.
- Heat mapping over an Image - **Resnet50**

## EDUCATION

### GRADUATION

**B TECH**, Computer Science (2016-2020)

Cambridge Institute of Technology – Bengaluru