Ankit Singh
Lead Engineer

AWS Certified Solutions Architect Associate

theankitsingh1999@gmail.com ✉
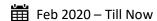https://theankitsingh.in/ ✇
Bengaluru, India ⚲

Full-stack developer skilled with Ruby on Rails, React, Python, and AWS services. Certified AWS Solution Architect with expertise in designing secure, scalable solutions. Experience at delivering high-quality end-to-end solutions on time.

PROFESSIONAL EXPERIENCE

Lead Engineer
LotusPay

📅 Feb 2020 – Till Now

Led the technical department as its only developer and establishing an agile framework. I engineered the cutting-edge tech stack to align it seamlessly with the organization's strategic objectives and achieving the result with improved overall efficiency

- Developed robust and scalable **REST APIs** functions using Ruby on Rails and Redis and EC2 which led to a **90% improvement** in overall system payment interactions. This freed up core servers for more **critical tasks.**
- Redesigned **A/B testing** to figure out which web page leads to max conversions and understanding **user** preferences and **behaviour**, leading to a **30% increase** in conversion rates.
- Streamlined real-time monitoring and reporting tools to track system performance, giving in a **95% reduction** in **downtime incidents** and maintaining an average **resolution time** of **less** than **5 minutes**.

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 boosted the **productivity** of the operations team by **150%**.

Payment's Importing System

- Created and coded a new technique to **import** all auto payment **data** from the **bank** to the native system, resulting in a **15x decrease** in server **processing time** (MySQL).

Platform Upgrade

- Executed the **upgrade** process and deployed the new environments on **AWS Elastic Beanstalk twice** a year, achieving **zero** cost **overruns** and zero production downtime.
- Analysed and utilitzed **AWS Route53** for **blue-green** deployment, **reducing downtime** by 30% during peak hours.
- Identified **performance bottlenecks** problem through profiling tools and implemented **caching** strategies, reducing server load by 50%, **improving** scalability and **saving** $10k/yrs on hosting expenses.
- Initiated customized error messages for each unused Rest API request, **reduced customer confusion** and **increased** overall **satisfaction** by 25%.
- Implemented HTTP protocols to execute **AJAX request** for **heavy queries**, **decreasing load time** from **7** to **1** sec.

AWS Service and Scripts

- Designed Linux services to prevent faulty deployments to production and manage ongoing background jobs using **Redis** and **sidekiq** refining the operations by 35%.
- 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.
- Implemented **payment popups** to meticulously track payments attributed to miscellaneous factors, resulting in **90% reduction** in payment drop cases.

SKILLS

- Ruby on Rails, Python, C++, JavaScript
- React, Flask, Shell Scripting
- MySQL, DynamoDB, PostgreSQL
- Redis, Sidekiq, Git, GitHub
- Amazon Web Services
- REST API's
- Dockers
- 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** 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 API's and list gets updated twice a year.
- Blood Bank Web Project - **Python, Flask, Google OAuth**
  - This Application maintains records, does a quick analysis of the blood category, and sends blood to the needy in under 1 second.
- Google Assistant App - **Google DialogFlow**
  - Created 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 (June 2016 – June 2020)
Cambridge Institute of Technology – Bengaluru