

## EXPERIENCE

### Howl / Narrativ

#### Senior Site Reliability/DevOps/Platform Engineer

March 2022 - Present

- ✓ Improved SDLC by enhancing CI/CD, documenting & introducing best practices, developing automation & IaC (infrastructure-as-code), monitoring, metrics & logging resulting in improved observability & incident response and cost optimization and improving collaboration between SRE & SWE.
- ✓ Designed and automated a highly efficient feed utils system using AWS Transfer Family, enabling seamless merchant feeds acceptance via FTP/SFTP. This improved data processing and reduced downtime, ensuring a smooth user experience.
- ✓ Introduced and formalized using AWS Secret Manager as a secure source for Kubernetes secrets.
- ✓ Identified and optimized Elasticsearch, RDS, Kafka, Airflow with more than \$10,000+ yearly savings while maintaining or improving performance.
- ✓ Implemented and assisted containerization and migration of legacy systems and services to EKS and set up auto-scaling.
- ✓ Migrated CI/CD Pipelines from ECS Jenkins to GitHub Actions and ArgoCD hosted on k8s to improve the build time, observability of builds & deployments.
- ✓ Ease developer experience on local devices by creating docker-compose & Makefiles. Resolved various compatibility issues for Arm-based M1 Macs.
- ✓ Improved resource tagging & organization on DataDog, improved overall observability, and alerting mechanisms company wide.
- ✓ Reduced toil by implementing several productivity tools like Vouch, and Secrets Reflector leading to increased team efficiency & reduced manual workload.
- ✓ Designed and implemented an automated setup of redirecting brand pages to microservice-specific URLs.
- ✓ Facilitate migration from a self-hosted authentication/authorization system using username and password to a managed AWS Cognito with SSO capabilities to improve and increase customer sign-up by 80%.
- ✓ Leveraged knowledge of Linux system administration, TCP/IP, HTTP, DNS, and networking fundamentals to perform on-call rotations, troubleshoot & debug production issues, root-cause analysis, and serve as a first line of defense as well as a "catch-all" team for issues, assistance, advice on system architectures.

### WebMD

#### Tech Lead

July 2021 – March 2022

- ✓ Managed WebMD's highly available Helios Platform (PaaS), delivering it as a robust & scalable service to internal & external teams.
- ✓ Mentored and guided teams & newly acquired businesses, throughout the onboarding, development & migration onto Helios Platform.
- ✓ Devised solutions for existing and new projects, effectively addressing challenges and enhancing/optimizing system performance, and reliability. Reviewed and refined existing architecture to ensure best practices were followed.
- ✓ Bridging the distance between Developers & SREs by leading the DevOps/Platform team & introducing DevOps methodologies across the organization.
- ✓ Designed & implemented a propriety A-B testing tool (Caching & Routing Engine) on OpenResty which is offered as a Service. It can split the traffic for URLs between multiple Microservices supporting features like routing based on Device-Type and Sticky Sessions, etc. and caches them separately for better performance.
- ✓ Designed & implemented active-active multi-datacenter setup increasing the reliability and efficiency and providing zero downtime during planned maintenance or outages ensuring uninterrupted service.
- ✓ Designed WebMD's Cache Flush Engine for clearing the Redis HTML & Cloudflare Edge Cache.
- ✓ Assisted the Performance & Core Web Vitals Team with performance improvement ideas that helped improve the CLS & LCP scores by 800%.

#### Platform Engineer (Sr. Developer)

Dec 2019 – July 2021

- ✓ Designed WebMD's Caching & Routing Engine developed in OpenResty (Nginx + Lua) that acts as reverse-proxy & handles traffic from multiple domains to 100s of Microservices hosting URLs/APIs serving millions of requests per day. This is offered as a reliable service across the entire Platform.
- ✓ Developed offering Centralized OAuth as a Service through the Caching & Routing Engine providing a secure and unified authentication solution for APIs.
- ✓ Developed event-based cache invalidation mechanisms to keep the cached pages up-to date with the latest content from the CMS.
- ✓ Managed the maintenance of the deployments on the Kubernetes Cluster including writing common templated yamls used by 100s of projects.
- ✓ Implemented horizontal pods auto-scaling for Microservices based on traffic demands, leading to optimal resource utilization and cost-efficiency.
- ✓ Automated the removal of old and unused Docker images from Artifactory and discontinued deployments from Kubernetes, optimizing storage.
- ✓ Implemented Cloudflare Worker for routing between legacy pages and Microservices and caching dynamic content on the edge.
- ✓ Implemented automated Change Management Tickets enhancing Observability and robustness of Production Deployments.
- ✓ Evaluated, Designed & Implemented the Serverless support using Fission.io on the Platform & offering it as a service.

#### Web Developer

March 2019 – Dec 2019

- ✓ Designed the WebMD's Helios Platform leveraging Docker container-based system running on Kubernetes. The transition from legacy systems resulted in improving build & development time as well as page performance by 100%.
- ✓ Setup GitLab runners on CentOS hosts, implementing image caching and automated cleaning strategies to minimize build times.
- ✓ Setup common templated GitLab CI/CD pipeline & processes for build & deployments for all WebMD projects to all environments which includes creating the docker images, pushing them to JFROG Artifactory & generating yamls to be deployed on the Kubernetes which is used by 100s of projects (helm-like).
- ✓ Developed common VueJS boilerplate to be used across WebMD which seamlessly integrated into the CI/CD.

#### Associate Web Developer

June 2018 – March 2019

- ✓ Integrated nightly Cypress Tests for business rules with the Jenkins build with integrated allure reports and email notifications.
- ✓ Improved WebMD LHD's page's SEO, which helped the search rankings notable increase in overall traffic to the website.
- ✓ Re-platformed Vitals (WebMD's acquisition) into the WebMD infrastructure ensuring smooth integration and compatibility with existing systems.
- ✓ Developed robust APIs to facilitate consumption of WebMD's SOLR data by Vitals enhancing collaboration between the platforms.

#### Senior Web Developer – Intern

June 2017 – April 2018

- ✓ Developing responsive Front-end pages of WebMD Labs & Local health directories.
- ✓ Developed a chatbot that can answer any health, treatment, and drug-related questions. It is accessible from most of the WebMD pages.
- ✓ Configured the chatbot as a framework which can be invoked and served through various methods, modules on several types of WebMD Pages which generated more than \$1 million in revenue.
- ✓ Wrote extensible stylesheets which can read the configuration set by ads/marketing team for easy configuration.
- ✓ Developed a web application for WebMD Spider Admin Search Platform that helps developers at WebMD to create on-demand APIs and test them which significantly reduced the time, complexity and steps involved for developers to create, deploy APIs and modify or monitor existing APIs.

## Education

### Master of Science, Computer Science

New Jersey Institute of Technology

Aug 2016 – Aug 2018

### Bachelor of Engineering, Computer Engineering

University of Mumbai

Aug 2012 – May 2016

## SKILLS

- Languages, Technologies, and Frameworks: Python, JavaScript, Lua, Go, Bash, Shell, HTML, CSS, VueJS, NodeJS, jQuery, Bootstrap.
- Orchestration: Docker, Kubernetes, Rancher, ECS, EKS, Helm.
- Load Balancers & Reverse Proxies: OpenResty, Nginx, Traefik, ELBs.
- Databases: RDS, SQL, Postgres, Redis, Elasticsearch, MySQL, NoSQL, MongoDB, Couchbase, DynamoDB.
- Message Queues: Kafka, RabbitMQ.
- CDNs: Cloudflare, CloudFront.
- Observability: Prometheus, Grafana, Datadog, Cloudwatch, ELK (Elasticsearch, Logstash, Kibana).
- Serverless: Cloudflare Workers, AWS Lambda, Fission.io
- Version Control & IaCs: Git, Stash, BitBucket SourceTree, Terraform, Cloudformation.
- CI/CD: Gitlab Pipelines, GitHub Actions, Jenkins, ArgoCD.
- Testing: WebDriverIO, Cypress, PyTest.
- Other Software Development Tools: JIRA, Confluence, Notion.