


# Shreyas M Kaushik

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## PROFESSIONAL SUMMARY

Senior Software Engineer specializing in Node.js and TypeScript, with extensive experience in integrating and optimizing A.I and M.L models through API implementation. Proven track record in building scalable, high-performance applications and microservices. Passionate about delivering innovative and impactful solutions to forward-thinking teams.

## EXPERIENCE

### IHX | SENIOR SOFTWARE ENGINEER

Jul 2024 – Present

- Led the development of a Persistence Engine using TypeORM and Node.js/TypeScript, creating a single-layer persistence for all extraction engines.
- Architected and implemented an Orchestration Engine using SQS to process digitization requests and track processes across different AI/ML entities.
- Designed and implemented a comprehensive Multi-Factor Authentication (MFA) and Single Sign-On (SSO) solution using Keycloak.

### IHX | SOFTWARE ENGINEER

Aug 2022 – Jun 2024

- Created Quality Control (QC) U.I Screens for enhancing data accuracy and presentation of ML model outputs and help retrain the models.
- Built fast, secure and efficient API layers for clients to consume AI model outputs.
- Ensured comprehensive observability across projects by implementing well-structured logging and integrating with Promtail, Loki and Grafana.

## PROJECTS

### PERSISTENCE ENGINE | TYPESCRIPT, NODE.JS, TYPEORM

- Developed a single-layer persistence solution for all extraction engines, reducing developer overhead in writing DB queries.
- Optimized database writes, reducing average query time from 1-2 seconds to 10-15ms across 10 tables.
- Increased overall productivity by streamlining data storage processes for multiple extractors.

### ORCHESTRATION ENGINE | TYPESCRIPT, NODE.JS, SQS

- Built a scalable system to process digitization requests and track processes across various AI/ML entities.
- Processes over 10 million messages per day.
- Consolidated statuses from various entities for easier visualization to clients.

### DOCUMENT CLASSIFIER | NODEJS, MONGODB, OAUTH 2.0

- Used by India's Largest Health Benefits Administrator for verifying mandatory documents submitted at claim submission.
- It provides clients seamless and secured integration to privately served Document Classification (DC) models.
- API increased the "complete claim submissions on the first instance" from 23% to 77% within 2 weeks.

### QC U.I SCREENS | MONGODB, REACTJS, NODEJS, MUI, REDUX

- Quality Control U.I screens for correction of M.L Model outputs.
- Built multiple screens according to the structure of claim documents like Bills, Discharge Summary and Lab Reports.
- The DC model accuracy was increased from 64% to 96%.

## EDUCATION

### SAPTHAGIRI COLLEGE OF ENGINEERING

BACHELOR OF ENGINEERING IN INFORMATION SCIENCE

2018 - 2022 | Bangalore, IN

CGPA: 8.5

## SKILLS

### PROGRAMMING

Typescript • Python

### WEB TECHNOLOGIES

Node.js • HTML/CSS • React.js • EJS

### INFRASTRUCTURE AS CODE

Docker Compose • Kubernetes YAML

### CLOUD SERVICES

AWS EC2 • Elastic Beanstalk • S3  
Heroku • GCP • Azure App Service

### CONTAINERIZATION

Docker • Kubernetes • Amazon EKS  
AWS Fargate • Amazon ECS

### OBSERVABILITY

Grafana • Promtail • Loki

### AUTHENTICATION

Keycloak • API Gateway • Cognito

### DATABASES

MongoDB • PostgreSQL

### ROUTING & WEB SERVERS

Nginx • ALB • NLB

### CI/CD & VCS

GitHub Actions • Github • Gitlab

### TESTING

Locust

## CERTIFICATIONS

 Architecting with Compute Engine

 The Modern Javascript Bootcamp

## BLOGS

 Mastering Multi-Factor Authentication in Keycloak

 Orchestrating Centralized User Management with Keycloak