UTKARSH RAJ

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SUMMARY

Results-oriented Software Developer with **3.5+ years** of experience as a **Full Stack AI Developer**, specializing in backend systems and architecture. Proven ability to lead and collaborate effectively in **fast-paced early startups** and **product-based** companies. Skilled in various programming languages, frameworks, and cloud technologies, with a strong focus on building scalable systems. I am excited to contribute my skills to further the company's objectives while continuing to enhance my capabilities .

TECHNICAL SKILLS

Back End Development: Java, Python, Spring Boot, FastAPI, Flask, Node.js, PostgreSQL, ElasticSearch, MilvusDB, Redis, Kafka, AWS, Azure, Docker, Linux, Microservices, Kubernetes, High Level Design, Low Level Design
Front End Development: JavaScript, JSP, React, Next.js, HTML, CSS
Miscellaneous: Conversational AI, Machine Learning, Deep Learning, Prometheus, Grafana

PROFESSIONAL EXPERIENCE

KJBN Labs, Bengaluru: Lead Full Stack Developer   November 2024 – February 2025
- Laid the foundation of the "Raithu" the Agritech SaaS platform, leading the initial architecture and development.
- Innovated the architecture from scratch by utilizing gRPC for communication between micro-services, optimizing performance and reducing latency. Utilizing FastAPI and Python in the process.
- Led the design and implementation of a scalable User Management service, integrating GraphQL Mesh for optimized data fetching. Architected authentication and authorization frameworks adhering to Clean Architecture and Domain-Driven Design principles to ensure maintainability and security

Lenskart, Bengaluru: Tech@Lenskart   May 2023 – October 2024
- Designed, developed, and integrated a **spring boot** compatible library for encrypting, decrypting and masking of **Personally Identifiable Information (PII)** data stored in databases or network transit and ensuring compliance with **data protection laws**.
- Productionized **Visual Search** to provide frame suggestions based on visually similar frames by leveraging YOLOv5 for frame detection, MilvusDB for vector search and integrated it with product listing and sorting API.
- Revamped the gift voucher flow written in spring boot by integrating it with our internal authorization and authentication service for CRUD operations, achieving **granular access control** and **improved security**.

Salesken, Bengaluru: Software Developer   July 2021 – May 2023
- Joined the company in its early growth stages and spearheaded the platform's development from **Series A through Series B** funding (backed by Sequoia Capital and Microsoft), leading the transformation from a two-participant **sales call** to a multi-participant architecture for analyzing **sales activities** such as conference calls, webinars, SMS, emails etc.
- Led a **team of 5** to design, develop, and scale the Sales Activity Analysis Engine V2 from scratch while also migrating the reporting queries from PostgreSQL to Elasticsearch, implementing semantic search, text completion, and fuzzy search using BERT and USE embeddings, resulting in **increased load capacity**, **3x faster page loads**, and **enhanced user experience**.
- Led the development and scaling of **Meet Bot** from **PoC to production**, enabling automated attendance tracking, recording, and live streaming audio from Google Meet, Zoom and WebEx using Puppeteer, Node.js, Websocket, Docker and Kubernetes and scaled it to handle **2k live concurrent** meetings.
- Design, develop, and scaled two core services from scratch **CRM Sync** and **CRM Import** that enabled seamless data synchronization from major CRMs like Salesforce, HubSpot, and SalesLoft; collaborated with the integration team to implement connectors. Handled periodic polling and pushing data, batch imports, S3 storage and Kafka to ensure efficient, scalable data management.
- Developed a deployment bash script that streamlined new environment setups and strategically migrated systems from AWS to Azure, and later to local GPU servers, **optimizing performance** and **reducing costs**.

Salesken, Bengaluru: Software Developer Intern Sep 2020 – Mar 2021
- Contributed in the development of **real time cue generation** engine for live sales activity based on conversation meaning, using **web socket**, **BERT** and **MilvusDB**.
- Spearheaded the development of a predictive model for lead conversion forecasting, and revenue intelligence achieving **86% accuracy** using Google AutoML, H2o.ai, Spring Boot and XGBoost.
- Created Automated Voice Response systems using the Twilio to verify user's phone numbers.
- Contributed to the migration of codebase from JAX-RS to Spring Boot

PERSONAL PROJECTS

EarTikl (eartikl.com) August 2024 – September 2024

EarTikl is an AI-powered music generation and translation platform focused on creating background music for ads, currently it is a prototype featuring a music player with generative music capabilities. Tech stack used: WavCraft, ReactJs, Spring Boot, Python, Flask, AWS. Github link, Demo link

CareerIn Platform Aug 2020 – Sept 2020

Led the full-stack development of CareerIn, a professional career counselling platform that employs AI-driven questionnaires to predict optimal career paths and provides insights into industry trends and alternative career possibilities. Tech stack used: H2o.ai, Spring Boot, XGboost, JSP, and PostgreSQL. Github link

Movie Recommendation System June 2019

Made a Movie Recommendation based on user rating using Netflix Dataset. Tech stack used: Machine Leaning, SCIKIT-Learn, NumPy, Pandas, MatplotLib. Github link

EDUCATION

Computer Science and Engineering 2017-21
BIT Sindri, Dhanbad, Jharkhand, IN 7.41 CGPA

12th | CBSE 2017
DAV Koyla Nagar, Dhanbad, Jharkhand, IN 88%

ORGANIZATIONS

Prayaas India (NGO), BIT Sindri: Teaching and Management 2017 – 2019
- Provided tutoring and support for underprivileged students (Class 1-10), collaborated with volunteers to create an inclusive learning environment, curriculum development, assessment, and community outreach.

The Arts Club, BIT Sindri: Violinist & Treasurer 2018 – 2021
- Participated and won multiple competitions. Managed finances and played a key role in organizing and hosting cultural festivals.

CERTIFICATIONS AND COURSES

Webtek Labs Pvt. Ltd, Kolkata: Summer Trainee July 2019
- Worked as a summer trainee. Worked on various ML-based projects including World Happiness report and Movie Recommendation using Netflix Dataset.

StruckHigh, Remote: Web Developer Intern July 2017
- Developed and managed both front and back end using WordPress.

HOBBIES AND INTERESTS
- Playing Violin
- Listening/Composing music
- Flashing and testing custom Android ROMs