

# Utkarsh Raj

## Full Stack AI Developer

I am an experienced software developer with a deep interest in the intersection of AI, music, and software development. I have a proven track record of designing, developing, and deploying AI-driven systems. Over the past **3+ years**, I've worked as a **Full Stack Developer**, focusing on building and scaling conversational AI systems. I am actively exploring AI models, latest research papers, and learning opportunities in the generative music AI space. I am eager to leverage my skills to innovate and contribute to cutting-edge projects in the AI and music domains.

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## WORK EXPERIENCE

### Software Developer Lenskart

05/2023 - Present

Bengaluru

Lenskart is a leading tech focused eyewear company offering a wide range of glasses with innovative technology like virtual try-on.

#### Achievements/Tasks

- Developed and Integrated **Visual Search** (frame suggestions based on face structure) using Facenet, yolov5 and **Semantic Search** using Algolia.
- Designed, developed, and integrated a versatile library compatible with Spring projects, facilitating seamless integration for encrypting or decrypting **Personally Identifiable Information (PII)** data stored in databases or in network transit, enhancing system security and ensuring compliance with **data protection laws**.
- Integrated Juspay payment gateway, enabling dynamic routing for both PayU and Juspay concurrently. Achieved a **10% increase** in uptime and more payment options, leading to a **5% increase** in revenue worldwide.

### Software Developer Salesken.ai

09/2020 - 05/2023

Bengaluru

Salesken helps companies realize the benefits of the "Science of Sales", the best of AI and Data Sciences to sales performance.

#### Achievements/Tasks

- Led the design, scaling, and development of the sales call analysis engine v2 from the ground up using Spring boot and microservice architecture, resulting in a **3X increase** in load capacity.
- Implemented cutting-edge semantic search, text completion, and fuzzy search using ElasticSearch, BERT, and USE embeddings, enabling meaningful search results based on text meaning, enhancing **user experience and search functionality**.
- Contributed in the development of **real time cue generation** engine for live sales calls based on conversation meaning, using web socket, BERT and MilvusDB.
- Built and scaled Webinar Bot which facilitates attendance, recording and live stream audio and video from Google Meet and Zoom. Used Puppeteer, Node.js and Kubernetes in the process which can handle **2k concurrent live** webinars.
- Conducted Proof of Concept (PoC) and developed a predictive model for forecasting the won-loss probability of lead conversation with **86% accuracy** using Google AutoML, and XGBoost.

## SKILLS

Java

Python

JavaScript

Conversational AI

ElasticSearch

Milvus

MongoDB

Spring Boot

NodeJs

Flask

Linux

Docker

Microservices

AWS

Azure

## EDUCATION

BIT Sindri (2017 - 2021)

B.Tech (Computer Science and Engineering)

## PERSONAL PROJECTS

CareerIn Platform (08/2020 - 08/2020)

- Led the development of CareerIn, a professional career counseling platform. Employs AI-driven questionnaires to predict optimal career paths, while also providing insights into industry trends and alternative career probabilities. **Tech stack** - H2O.ai, Spring Boot, Spring Security, JSP, and PostgreSQL.
- Github link** - <https://github.com/SkilledIn-Labs/careerIn>

Movie Recommendation System (06/2019 - 07/2019)

- Developed a Movie Recommendation based on user rating using Netflix Dataset. **Tech stack** - Machine Learning, scikit-Learn, NumPy, Pandas, Matplotlib.
- Github link** - <https://github.com/theroyalraj/Machine-Learning>

## ACHIEVEMENTS

Employee of the Quarter award (07/2017 - 06/2021)

Received the "Employee of the Quarter" recognition for my contribution in the development of analysis engine in the record time of 5 days.

## ORGANIZATIONS

Prayaas India (NGO) (2017 - 2020)

Teaching and Management

The Arts Club (2018 - 2021)

Treasurer

## INTERESTS

Listening/Composing Music

Playing Violin