

Avhirup Chakraborty

avhirupchakraborty@gmail.com | [in](#) | [📞](#)+91-8484008910

EXPERIENCE

Embibe

Bangalore, India

Data Scientist (Search and Discovery Team)

August 2019- Present

- Implemented Query Understanding & Relevance Ranking module to detect user's intent, identify knowledge graph entities & rank results based on relevancy, popularity and freshness.
- Re-architecture of Embibe Ask Search Service with added support for Faceted search, Image Search, Question Recommendation and Auto-suggest .
- Designed Search Evaluation Framework to monitor & track search evaluation metrics .
- Wrote Airflow pipelines for consumption from Data Platform to Serving layer.

Arya.ai

Mumbai, India

Research Scientist (Insurances Team)

May 2017- July 2019

- Implemented real-time & batch ETL pipelines;orchestrated and scaled using Apache Airflow & REST APIs.
- Develop multiple machine learning models for use cases such as health claims automation, life insurance underwriting.

Indian Institute of Technology

Madras, India

Project Associate - Computer Vision Lab

Feb 2018 - Aug 2018

- Responsible for research and prototyping conditional inpainting under Prof. Dr. Anurag Mittal.
- Developed & trained models using PyTorch;leveraged TensorBoard to keep track and evaluate experiments

SKILLS

- **Languages:** Python, C++, Java
- **ML Framework:** TensorFlow, PyTorch, Keras, Scikit-Learn
- **Libraries:** Numpy, Pandas, Spark, Jupyter, OpenCV, PIL
- **Technologies:** AWS, GitHub, S3, Docker
- **Databases:** MySQL, MongoDB, Redis, ElasticSearch
- **Framework:** ElasticSearch, Kafka, Fastapi

PROJECTS

Query Understanding and Relevance Ranking

Built end-to-end production system including query understanding and ranking to power search. Wrote the Query Understanding module consisting of query rewrite, intent detection, & academic entity tagger. Analyzed search ranking and relevance requirements, issues .

Embibe Ask Search

Built an end-to-end search service for Embibe Ask(A platform similar to **Quora**). The search service supports for faceted search, image search, question recommendation , auto-suggest for question and topic. Wrote airflow pipelines to consume Kafka events from Data lake , process & format them and ingest to the Serving Layer(Elasticsearch)

Signature Verification

Developed model for efficient signature embedding for signature similarity using triplet loss. Approach based on *FaceNet: A Unified Embedding for Face Recognition and Clustering*.

Life Insurance & Health Claim Automation

Collaborate to create an ecosystem of machine learning solution for life insurance and health claim.Developed model to adjudicate policy proposals & health claims with 94% accuracy. Designed model to predict multiple reasons for health claim denial

EDUCATION

Walchand College of Engineering

Sangli, India

Bachelor of Technology in Computer Science

GPA: 8.21/10.0

ADDITIONAL EXPERIENCE & ACHIEVEMENTS

- Invited Speaker, as part of workshop conducted under AI Summit, IIT Bombay
- Invited to talk about "Applicability of Deep Learning in Finance" at CodeUp Mumbai organised by PayU
- Awarded Badass of the Week by Siraj Raval on channel "Sirajology" for winning stock market prediction challenge using twitter api
- Served as Vice President for College Club, PACE