

KAUMIL TRIVEDI

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Education

Simon Fraser University

Professional Master of Science in Computer Science, Big Data Specialization

Sep. 2021 Intake

Burnaby, BC

Gujarat Technological University

Bachelor of Engineering, Computer Engineering; CGPA: 9.22/10

Jul. 2014 – May 2018

Gujarat, India

Experience

Data Science and Engineering (Blogging Website) 🌐

Apr. 2021 – Present

Owner and Writer

- Developed a blogging website using Wordpress which documents projects as a series of blogs similar to chapters of a book. Users can follow along with a project to learn about and implement it.

Freelancer

Apr. 2021 – Present

Developer

- Developed a search engine to import and index data from the O*NET database to build the backend of a job portal for job seekers. Used Elasticsearch as the engine to search about 100k rows with about 150 features. Used FastAPI for async indexing and Jinja2 as a template engine.
- Developed a system to create question and answer from english corpuses uploaded by the user using a HuggingFace transformer and load the question-answer pair to a backend RDS database.

Areli Commerce Private Limited (Frendy) 🌐

Apr. 2019 – Apr. 2021

AI Developer

Gujarat, India

- Responsible for developing and maintaining a search system using AWS Elasticsearch, handling around 200k queries a month.
- Developed a novel relevance sort algorithm to sort products using custom metrics as required by the business. This was adopted as the default sorting approach of displaying products across the e-commerce site, decreasing the customer attrition.
- Developed a serverless recommender system using the k nearest neighbours algorithm using Flask, AWS Fargate and RDS. Worked alongside the mobile developers to insert event triggers to monitor the health of the application and provide analytics.

Turabit Solutions Private Limited 🌐

Jun. 2018 – Mar. 2019

AI Developer

Gujarat, India

- Worked on development of chatbots and developed API to make the chatbot install software applications on target machine as well as schedule the chatbot to perform a certain function at a time selected by the user.
- Trained machine learning models to perform text classification and determine the intent of the user query and trigger the necessary functions required to complete the requested task.

Projects

Data Analysis using Spark and Elasticsearch 🌐 | *Python, Nifi, Docker, Spark, Elasticsearch* **Apr. 2021 – May. 2021**

- Created a data pipeline to ingest New York accident data using Apache Nifi and save it to HDFS and later transform and analyze the data using Apache Spark.
- Wrapped the entire workflow using docker containers and worked on storing the data in Elasticsearch and create dashboards using Kibana.

Blogging Website 🌐 | *Python, Flask, SQLAlchemy, Elasticsearch, Heroku*

Jul. 2020 – Aug. 2020

- Created a blogging website using Flask framework as well as used SQLAlchemy for building relationships and CRUD operations. Established a mechanism for a user to follow different people and have the posts of the followed people on the home page.
- Established an “Explore” feature where a user can explore different posts from all the users on the website in a descending order of the post timestamp. Established a “Search” feature using Elasticsearch where people can search for a keyword and have relevant posts displayed. Deployed on Heroku using PostgresDB and Searchbox ES add-ons.

Emof_AI 🌐 | *Python, Flask, Tensorflow, Jinja2*

Jan. 2018 – Mar. 2018

- Trained a convolutional neural network to capture faces in a video stream and detect the emotion, gender and age group of the person.
- Developed a data analytics graph capturing the demographics of the proportions of the emotions in the video, grouped by age and gender. Wrapped the entire workflow with a Flask API and used Jinja2 as a templating engine.

Publications

A Hybrid Binary Classifier for Pattern Classification 🌐

Sep. 2019

IEEE 5th International Conference of Data Science and Engineering(ICDSE)

IIT Patna, India

- Developed and presented a hybrid classifier model combining a decision tree with support vector machine. The resultant model had better accuracy and easy interpretability. Tested the hybrid model on 25 various UCI datasets to assess its performance and robustness

Technical Skills

Languages: Python, SQL
Databases: MySQL, MongoDB, RDS, DynamoDB
Frameworks: Flask, FastAPI, Tensorflow, PyTorch, Elasticsearch
Technologies: AWS, Docker, Git

Certifications

AWS Certified Developer Associate 🌐 | *Amazon Web Services*

Nov. 2020 – Nov. 2023

Deep Learning Specialization 🌐 | *Coursera*

Mar. 2018 – Present