# **KAUMIL TRIVEDI**

Professional Masters of Science in Computer Science Student - Big Data

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#### **TECHNICAL SKILLS**

Languages: Python, SQL

Databases: MySQL, RDS, DynamoDB

Frameworks: Flask, FastAPI, Keras, PySpark, Elasticsearch

Technologies: Apache Spark, Hadoop, MapReduce, Scikit-Learn, Numpy, Pandas, Keras, AWS Elasticsearch, AWS Fargate, AWS S3,

AWS Lambda, AWS API Gateway, AWS EC2, Docker, Git

#### **TECHNICAL WORK EXPERIENCE**

# Areli Commerce Private Limited &

Apr 2019 - Apr 2021

Al Developer

Gujarat, India

- Led a team of 3 developers to integrate CleverTap, a customer lifecycle management and marketing platform, in the e-commerce application Frendy. Studied and analyzed the various metrics required to determine the health of the platform, user behaviour and bugs.
- Conceptualized a novel sorting algorithm to display the products to the user using Flask, Pandas and AWS. The approach allowed business stakeholders to influence the sorting order of products using custom metrics. Adopted as the default sorting approach across the platform, decreasing the customer attrition by 10% and increasing the customer satisfaction by 20%.
- Implemented and maintained a search system using Flask and AWS Elasticsearch to handle around 200k queries a month. Developed a recommender system using the K Nearest Neighbours algorithm and deployed it in serverless fashion using Flask, Surpriselib, AWS Fargate and RDS.

# Turabit Solutions Private Limited &

Jun 2018 - Mar 2019

Al Developer

Gujarat, India

- Developed API using Flask to help the system administrator install specific software applications on target machines in a network.
- Worked on a feature to schedule the installation and various other services at a time convenient for the system administrator.
- Trained Random Forest Classifier using Sklearn and NLTK to perform text classification with 95% accuracy and determine the intent of the user query and trigger the necessary functions required to complete the requested task.

# **TECHNICAL PROJECTS**

# Emof\_Al (Final year Project) &

Jan 2018 - Mar 2018

Python, Flask, Keras, Jinja2

- Conducted surveys to understand the fallacies committed by the automobile companies in understanding customer's intent in buying a product.
- Trained a Convolutional Neural Network using Keras to capture faces in a video stream and detect the emotion, gender and age group of the person with 99.2% accuracy.
- Built a web API using Flask and Jinja2 to provide users with a graph capturing the demographics of the proportions of the emotions in the video, grouped by age and gender.

# Data Analysis using Spark and Elasticsearch (Personal Project) ${\cal O}$

Apr 2021 - May 2021

Python, Apache Nifi, Docker, Apache Spark, Elasticsearch

- Architected 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.
- Containerized the entire workflow using Docker. Worked on indexing the data using Elasticsearch and created dashboards using Kihana

# MicroBlogger (Personal Project) ගි

Jul 2020 - Aug 2020

Python, Flask, SQLAlchemy, Elasticsearch, Heroku

- Developed a micro-blogging platform using Flask and SQLAlchemy to facilitate users to create micro-blogs as well as follow their favourite bloggers.
- Devised a "Follow" feature, allowing the user to follow their favorite bloggers and have their posts displayed in the feed. Created 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.
- Worked on a "Search" feature using Elasticsearch where people can search for a keyword and have relevant posts displayed. Deployed the site on Heroku using PostgresDB and Searchbox ES add-ons.

# **EXTRA-CURRICULAR ACTIVITIES**

# Founder and Author, DSE Blogs &

Apr 2021 - Present

- Analyzed the current blogging market and the existing problems faced by the users while reading technical blogs. Designed a new approach to writing technical project blogs, enabling the user to read the blogs sequentially, similar to reading an online book.
- Designed and developed the blogging site using WordPress. Integrated various features to facilitate a better user experience and determine the health of the website.

### Member, SFU Finance Club &

Sep 2021 - Present

• Joined the SFU Finance Club to enhance my knowledge about various subjects in the domain of finance.

# Teaching Assistant, Simon Fraser University ${\cal O}$

Sep 2021 - Present

• Working for the course CMPT 125 - Introduction to Computer Science and Programming II (Fall 2021) at present. Responsible for preparing concept slides for the tutorials, grading assignments, assisting students in the tutorials and conducting office hours.

#### **EDUCATION**

#### **Simon Fraser University**

Sept 2021 Intake

Professional Masters of Science in Computer Science, Big Data Specialization

Burnaby, BC

Courses (ongoing): Machine Learning, Big Data Lab

### **Gujarat Technological University**

Jul 2014 - May 2018

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

Courses: Databases, Data Structures, Python Programming, Artificial Intelligence

# Gujarat, India

# **SELF-DIRECTED LEARNING / CERTIFICATIONS**

AWS Certified Developer Associate  $\mathscr{O} \mid Amazon \ Web \ Services, Inc.$ Advanced SQL: MySQL Data Analysis & Business Intelligence  $\mathscr{O} \mid Udemy, Inc.$ Spark and Python for Big Data with PySpark  $\mathscr{O} \mid Udemy, Inc.$ Taming Big Data with Apache Spark and Python - Hands On!  $\mathscr{O} \mid Udemy, Inc.$ Deep Learning Specialization  $\mathscr{O} \mid Coursera, Inc.$ 

Nov 2020 - Nov 2023

Apr 2021 Sep 2019

Sep 2019 Aug 2019

Mar 2018

#### **PUBLICATIONS**

# A Hybrid Binary Classifier for Pattern Classification ${\cal O}$

Sep 2019

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

IIT Patna, India

- Researched Support Vector Machines and Decision Trees to create a hybrid classifier model using scikit-learn, with the goal of better accuracy and easy interpretability.
- Evaluated the model on 25 various UCI datasets, determining an average improvement of 4% in accuracy and 3% in F1-score values compared to the individual decision tree and support vector machine models.

### **AWARDS**

#### **Employee of the Month**

Jan 2020

Areli Commerce Private Limited

Gujarat, India

 Awarded Employee of the Month for exemplary performance in developing and integrating a novel product sorting algorithm for displaying products on the e-commerce platform.