Saif Gazali

Website

Github

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(Preferred)

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EDUCATION

UNIVERSITÉ DE MONTRÉAL
MASTER OF COMPUTER SCIENCE
Sep 2022 - Present | Montréal
Département d'informatique et de
recherche opérationnelle
GPA: 4.0/4.3

VIT UNIVERSITY
BACHELOR OF COMPUTER SCIENCE
Sep 2016 - May 2020 | Chennai
Department of Computer Science
CGPA: 9.07/10.0

SKILLS

Python • Java • SQL
Tensorflow • Pytorch • Pandas •
Huggingface

DEPLOYMENT

Flask • Heroku • Docker

LANGUAGES

French (B1 Level)
English (C1 Level)

COURSEWORK

GRADUATE
Fundamentals of Machine Learning
Data Science
Representation Learning (Winter 2023)
Advanced Machine Learning Projects
(Winter 2023)

UNDERGRADUATE
Machine Learning
Data Visualization
Data Structures and Algorithms
Database Management System
Statistics
Linear Algebra

ACHIEVEMENTS

TECHNICAL ANSWERS TO REAL WORLD PROBLEM
Won 1st prize in the VIT Chennai's TARP
Hackathon for making a smart waste
disposal system.

KAGGLE COMPETITIONS
Ranked 2nd in the **Text Sentiment
classification** challenge and 14th in the
MNIST classification challenge.

PROFESSIONAL EXPERIENCE

SIEMENS EDA | SOFTWARE ENGINEER
July 2020 - June 2022
- Improved common actions of the tool using the concept of Multithreading, Java thread pool, optimal resource sharing and caching by around 30-40% on large scale customer projects.
- **Key achievement:** Received the **best performer award** for the year 2021 for optimizing the topology software and making it more responsive for customers such as Boeing and Airbus.

SIEMENS EDA | SOFTWARE ENGINEER INTERN
December 2019 - June 2020
- Optimized the SQL queries in order to have faster lookups and getting the data from the DB efficiently. Improved the performance and the responsiveness of the system by around 20% for certain queries.

PROJECTS

IMAGE-TO-IMAGE TRANSLATION USING PIX2PIX GAN
| Blog
- Implemented the Pix2Pix Gan model to translate Satellite images to Google map images achieving an average Frechet Inception distance of 110.

TEXT SUMMARIZATION FOR CNN-DAILYMAIL DATASET
- CNN-Daily mail dataset contains around 300k news article. Implemented state of the art models like GPT-2, BART, T5 and Pegasus to create summaries for the news articles. Bleu and Rouge metric were used to evaluate the generated summaries. GPT-2 outperformed other models achieving a rouge-1 score of 0.18.

IMAGE CAPTIONING WITH VGG16-LSTM MODEL FOR FLICKR-8K IMAGES | Blog
- Implemented a model which generates descriptions for an image using VGG16 as an encoder model to extract features from the image achieving a loss value of 1.5987 and and used a LSTM model as a decoder to generate the captions for the image using Beam search as well as traditional Greedy search algorithm.

MNIST HANDWRITTEN DIGITS GENERATION USING DIFFERENT GANS AND ENCODERS | Blog
- Generated MNIST Handwritten digits using GANS such as Semi-Supervised GAN, Auxiliary GAN, Conditional GAN and DCGAN. Also implemented the Convolutional and the Variational Encoder to generate the same.

PUBLICATIONS

CUSTOM BLOCK CHAIN BASED CYBER PHYSICAL SYSTEM FOR SOLID WASTE MANAGEMENT |
Paper

FORECASTING ELECTION DATA USING REGRESSION MODELS AND SENTIMENTAL ANALYSIS | Paper