Soumitra Das

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| EDUCATION | | | |
|---------------------------------------|----------------------------|-------------|--------------|
| Institute | Degree | Year | GPA/Marks(%) |
| Indian Institute of Technology Madras | M.Tech Data Science and AI | 2024-2026 | - |
| Indian Institute of Technology Delhi | M.Sc Mathematics | 2020 - 2022 | 6.88/10 |
| Ramakrishna Mission Vidyamandira | B.Sc(Hons.) Mathematics | 2017 - 2020 | 7.75/10 |
| WBCHSE | Higher Secondary | 2017 | 85.2 % |
| WBBSE | Secondary | 2015 | 84.14 % |

RELEVANT COURSES

- Sequence Models [by deeplearning.ai]
- Convolutional Neural Network [by deeplearning.ai]
- Getting Started with AWS Machine Learning [by AWS]
- Pandas [by Kaggle]
- Introduction to Machine Learning[by Kaggle]
- intermediate machine learning[by Kaggle]
- HuggingFace NLP Course [by Huggingface]
- Build Basic Generative Adversarial Networks (GANs)(ongoing) [by deeplearning.ai]
- Data Structures and Algorithms, Mathematical programming, Numerical Analysis, Linear algebras, Data Mining, Cryptography, Graph Theory

TECHNICAL SKILLS

- NLP: transformers, Language Models(Bert, GPT), MinGPT Name Entity Recognition, Machine Translation, Questoin Answering
- Computer Vision: Object Detection [with YOLO], semantic segmentation [with UNet], Face recognition, Neural Style Transfer
- Deep Learning, Machine Learning, Basic GANs
- Machine Learning Tools/Libraries: Pytorch, transformers, datasets, tokenizers, scikit-learn, OpenCV, Keras, tensorflow
- Programming Languages: Python C++, C, JavaScript, MySQL, R, Octave
- Others: Git, Github, Basic Web development, linux (debian based)

MSC THESIS

• Image Encryption using two square cipher associated with Arnold map [Supervisor - Prof. Rajendra Kumar Sharma](Deployed a python project for image encryption based on this paper.)

PROJECTS

- Minbert for multitasking: i. Here I created a Minimum representation of Bert and finetuned it for sentiment classification on SST and CFIMDB dataset. ii. In the second part I extend and finetuned the pretrained Bert multiple downstream task(Sentiment Analysis, Paraphrase Detection and Semantic Textual Similarity) on SST, Quora dataset and SemEval STS Benchmark dataset respectively.
- Neural Machine Translation (Chinese to English) with attention RNN: Implemented some of the major portion of the transformer architecture and used those model for machine translation.
- Chegg Expert Extension: Designed a chrome extension for easy navigation and notification for subject matter experts of the educational platform Chegg.