Arkaprava Majumdar, https://github.com/uncertainity, **arkaprava.majumdar.stats@gmail.com**

Passed out from Delhi University (India) with a master's degree in statistics (2020), I have an avid interest in Deep Learning. I have taken a few courses on the subject and studied 'generative modelling' and 'solving differential equations using neural network' on my own. I wish to pursue a career in ML&AI, and hence, I am exploring opportunities for research or hands-on experience in Deep Learning.

EDUCATION:

University/ Institute/ Board	Degree	Year	Marks
University of Delhi, India (Ramjas College)	**M.Sc Statistics** Subjects included: Stochastic Processes, Bayesian Inference, Machine Learning *Composed an article (unpublished) on Discriminant Analysis techniques following detailed literature search on the topic as an assignment on Multivariate Analysis under the guidance of Dr Taruna Kumari Pathak, Professor, Delhi University.*	2018 -20	Marks:87.95% (Rank-1 in College)
University of Delhi, India (Ramjas College)	**B.Sc Statistics** Made a presentation titled **Mechanism of the SIR epidemic model–A Random Walk Approach** in the Fest of the Department of Statistics of Ramjas College (together with Mr Sanket Agarwal, a fellow student of Ramjas College).	2015 -18	CGPA:8.743
Indian School Certificate (ISC)	Class-XII	2015	Marks: 95.2%
Indian Certificate of Secondary Education (ICSE)	Class-X	2013	Marks: 94.33%

Participated in **Winter School on Machine Learning/Artificial Intelligence** in Indraprastha Institute of Technology, Delhi (2018-19).

Completed '**Probabilistic Deep Learning using Tensorflow 2.0**' from Coursera. Coursework includes

Capstone Project: Generating an image dataset using Flow model and then training a Variational Auto Encoder on the generated dataset.

Building a Variational Auto Encoder on celeb-a dataset

Training a flow model (RealNVP architecture) on LSUN-bedroom dataset

PROGRAMMING SKILLS: Python, R, C,

WORK EXPERIENCE

Bonanza Interactive (https://www.bonanzainteractive.com/),
Internship: September 2020 – December 2020
Slot Game Mathematician: January 2021- present
My work involves ***designing, testing and analysing the probabilistic models of games played in casinos***. Four games, where I made significant mathematical contribution, have already been released online.

Insight Eye Clinic (Delhi, India): worked with Dr Saurabh Sawhney, Ophthalmologist, currently working as a Software Engineer in Koverhoop Technologies
Research Intern: September 2019 – January 2020
Contributed to his project on studying ***regression and machine learning models (RBF neural network) used for calculating IOL power***.

PERSONAL PROJECTS [All of my coding work can be found in my github profile]

Comic Translation (on going): The project is divided into the following tasks:

1. Recognising the text and the geometry of the text from an image (text recognition in wild)
2. Constructing sentences from the words.
3. Translating the words into a chosen language.

The first objective was achieved by using a package called Easy-OCR. For sentence construction from words I applied clustering algorithm on the coordinates of the texts. Yet to start working on the third objective.

Sentiment Analysis using BERT model: An app store review dataset was taken and sentiment analysis was performed on the dataset after rigorous pre-processing by modifying a pre trained BERT model.

LIDAR SLAM simulation: The project aims to simulate how sensor detection works. It is a code written in Python to draw a map of the obstructed path at a given distance around a sensor.

Implementation of various algorithms from scratch in python: I have written codes in python and from the scratch for several optimization algorithms (such as Expectation-Maximization, Newton's Method and similar ones) which are parts of standard packages. My objective was to understand how those algorithms work.

PERSONAL DETAILS

Date of Birth: 23rd August 1997
Mobile: +91 7044942883
Address for communication: C-152, Mahendru Enclave, First Floor, Delhi – 110033
Hobbies and Interests: Football, eGaming