# Durjoy Sen Maitra

## Personal Data

| | |
|---|---|
| Place and Date of Birth: | Kolkata, India | 28 April, 1991 |
| Permanent Address: | Teghoria, Jugberia, Manikdanga Road, Kolkata 700110 |
| Present Address: | 13A Yogendra Bhawan, JB Nagar, Andheri East, Mumbai 400059 |
| Phone: | +91 7045777982 |
| email: | durzoy@gmail.com |

## Work Experience

**Current**
**February 2018**
Deputy Manager - Operations at Mahindra Finance, Mumbai
*Creating models, Generate Analytics, Project Management*

**Past**
**March 2016 - Feb 2018**
Machine Learning Developer at Decimal Point Analytics, Mumbai
*Artificial Intelligence*
Developing end to end artificially intelligent systems to create unique tailor-made-products, real time services and solutions, optimizing human efforts.

**Past**
**Oct 2013 - Feb 2016**
Project Linked Person at Indian Statistical Institute, Kolkata
*Handwriting Recognition using Machine Learning and Image Processing*
Worked in the research project "Online Hand Writing Recognition (OHWR) - Phase II" funded by Technology Development for Indian Languages (TDIL) Programme of the Dept. of Information Technology, Govt. of India

## Key Skills

| | |
|---|---|
| Domains | Financial Computing, Text Processing, Computer Vision |
| Machine Learning Algorithms | CNN, MLP, NN, Decision Tree, Random Forest, SVM, KNN, etc. |
| Data Analysis Tools | DataFrames, Pandas, Plots, Numpy, Weka, Gensim etc. |
| Machine Learning Library | Scikit-Learn, Tensorflow, Mocha, Keras, word2vec etc. |
| Programming Languages | Python, Julia, C, C++, R, Matlab, SQL, LaTeX |
| Computer Vision Tools | Tesseract OCR, OpenCV, Scikit-Image, Online/ Offline Handwriting Recognition, |

## Projects

@ Decimal Point Analytics
**Financial Recommendation System**
A decision tree based end to end system to predict which investors are willing to invest on which companies analyzing the historical data of both investors and companies.

@ Decimal Point Analytics
**Data-loader and Alpha Factor Generator**
A data loading application to load financial updates from Quandl into database on a daily basis. Using the fundamental data of the companies, we derived more than 500 new complex financial factors that helps the recommendation system to predict the the potential buyers and sellers.

@ Decimal Point Analytics
**PDF Information Extraction System**
An application to extract useful information from the pdf files, having scanned images, based on tesseract OCR engine.

@ Decimal Point Analytics
**Text Sentiment Analysis**
Developed an 11 class ($-5$ to $+5$) english text sentiment classification system using convolutional neural network and google's word2vec model.

@ Indian Statistical Institute
**Character Recognition System Using Convolutional Neural Networks**
Developed a transfer learning based character recognition system with convolutional neural network and support vector machine. Detailed description can be found in the published paper "CNN based common approach to handwritten character recognition of multiple scripts".

@ Indian Statistical Institute
**Bangla Online Hand-Writing Recognition System**
An end to end system to recognize unconstrained online bengali handwriting data on character, word, line and paragraph level. Detailed description can be found in the published paper "End-to-End System for Bangla Online Handwriting Recognition".

## Publications

1 | Soumik Bhattacharya, **Durjoy Sen Maitra**, Ujjwal Bhattacharya and Swapan Kr. Parui , **"An End-to-End System for Bangla Online Handwriting Recognition"**, 15th International Conference on Frontiers in Handwriting Recognition **(ICFHR)**, China, 2016, pp. 373-378

2 | **Durjoy Sen Maitra**, Ujjwal Bhattacharya and Swapan Kr. Parui , **"CNN Based Common Approach to Handwritten Character Recognition of Multiple Scripts"**, 13th International Conference on Document Analysis and Recognition **(ICDAR)**, Tunis, 2015, pp. 1021-10257

3 | **"ICDAR2017 Competition on Recognition of Early Indian Printed Documents – REID2017"**, The 14th IAPR International Conference on Document Analysis and Recognition **(ICDAR)**, Kyoto, Japan, 2017

## Education

JULY 2013    Master of Science, **West Bengal State University**, India
*Full time course* | Major: Computer Science
Dissertation: "Three Phases: An Automated Approach"
PERCENTAGE: 78.08

JULY 2011    Bachelor of Science with HONOURS, **West Bengal State University**, India
*Full time course* | Major: Computer Science
Project: "Obstacle Avoider"
PERCENTAGE: 70.25

JULY 2008    Higher Secondary, **West Bengal Council of Higher Secondary Education**, India
*Full time course* | Major: Mathematics, Physics, Chemistry, Biology
PERCENTAGE: 80.60

JULY 2006    Secondary, **West Bengal Board of Secondary Education**, India
*Full time course*
PERCENTAGE: 75.75

## Scholarships and Certificates

JULY 2011    Ranked $9^{th}$ in BSc (Computer Science) at **West Bengal State University**, India.
2012 - 2013    Achieved **West Bengal Merit Cum Mean Scholarship** for Higher Study.

## Languages

BENGALI:    Mother tongue
ENGLISH:    Fluent
HINDI:    Basic Knowledge

## Interests and Activities

Technology, Programming, Music
Cricket, Travelling, Movies

## Declaration

I hereby declare that all the details given above are true to the best of my knowledge.


Signature with Date: