Ranjan Mishra

Curriculum Vitae

EDUCATION

M.Tech. Computer Science 2015-2017

Indian Statistical Institute, ***71.1%(Till third sem)***

Relevant Courses: Probability and Stochastic Process, Discrete Mathematics, Algorithms, Pattern Recognition, Computational Finance, Advance Pattern Recognition

B.Tech. Information Technology 2008-2012

SASTRA UNIVERSITY, ***7.56/10***

Relevant Courses: Data Structures, Design and Analysis of Algorithms, Distributed Computing, Data Mining and Data Warehousing, Soft Computing Techniques

WORK EXPERIENCE

System Engineer 2012-2015

Tata Consultancy Services

Worked as ETL developer for business intelligence projects, role involved to gather the requirements from business and implement the ETL to extract data from various platforms such as flat files, teradata, oracle and saleforce and load to common dataware house in teradata platform. Gained experience in tools such as Informatica powercenter, teradata utilities etc.

ACADEMIC PROJECTS

Optimal Portfolio Liquidation in Dark Pool In Progress

M.Tech Dissertation Project

Objective of this project is to develop a dynamic strategy to put market orders and dark pool orders for a large investor trying to liquidate his portfoli such that his overall return is maximised. Formulated the problem as Markov decision process and hence stocahstic dynamic program to optimize. Since the state space as well as decision space is large, the backward dynamic programming solution does not work. As a result to approximate value function neural network and kernel based machine learning approch is applied.

Seizure Prediction from EEG Data Jan-Feb 2017

Indian Statistical Institute

Objective was to classify between preictal(before seizure) and interictal(between seizure) EEG data of epilepsy patients.Raw EEG data was each 10 min long EEG clip of electrode reading of 16 electrode channels.Different features such as Shannon entropy, spectral edge frequency, correlation between channels etc were taken.PCA was used to reduce dimensionality and applied SVM , MLP and Naive Bayes for classification. More details and codes are available at https://github.com/rjmishra/Seizure-Prediction-EEG

Image segmentation using Machine Learning March 2017

Indian Statistical Institute

Implemented algorithms such as Naive bayes, Bayes, k-NN to differentiate between water and land area of Kolkata sattelite image. Implented in python, codes are available at https://github.com/rjmishra/machineLearn

Fuzz Clustering based Time Series Prediction Jan-Mar 2012

SASTRA UNIVERSITY

Applied fuzzy time series based prediction of BSE SENSEX data. Data was normalized to include only change in the time. Fuzzy c mean clustering was used for fuzzyfying the data. Finaly based on FLR groups prediction was made, and data was defuzzified.

SKILLS AND INTERESTS

Languages	C/C++, Java, Python, R
Software	MATLAB, LaTeX, Informatica, Eclipse, Teradata
Interests	Machine Learning, Approximate Dynamic Programming

OTHER ACHIEVEMENTS

GATE-2015	Achieved All india rank 394 in computer science stream
AIEEE-2008	Ranked among top 2% in AIEEE 2008 exams

CONTACT DETAILS

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