AJAY SUNARTHI

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EDUCATION

CERTIFICATE	INSTITUTE/BOARD	YEAR	PERCENTAGE/CPI
B. Tech.	Indian Institute of Technology, Jodhpur	2015	6.2
A.I.S.S.E	Central Board of Secondary Education	2011	85.4
A.I.S.S.C.E.	Central Board of Secondary Education	2009	84.4

INTERNSHIP

MARKETOPPER EASY LANGUAGE EXTENTION (MARKETOPPER SECURITIES LTD., GURGOAN)

Guide: Ashish Pancholi   [May - July 2014]

- Created a code converter in Python which can produce executed tradesheet and plot from given 'EasyLanguageCode'
- Created and tested Trading strategies on Omega Tradestation
- Developed basic understanding about **algorithmic trading**, **financial markets** and **trading basics**

PROJECTS

SENTIMENT ANALYSIS ON SHORT TEXT/TWEETS

Guide: Dr Ganesh Bagler   [Oct2014-Feb2015]

- Created simple rule based model to know the general sentiments using combination of quantitative and qualitative methods
- Compared this model with another model which used combination of bag-of-models and machine learning methods
- Both of these methods achieved sentiment polarity accuracy of 75.4% and 81.2%.
- Tried to find the intensity scores of given text/tweet on positive, negative and neutral sentiments

IMPROVING MARKOWITZ PORTFOLIO SELECTION MODEL AS AN INVESTMENT STRATEGY

Guide: Dr Vivek Vijay   **[** March– April2014**]**

- Applied the theory of Markowitz to BSE to establish whether an optimal portfolio can be identified and used as an effective trading rule using MATLAB
- Daily data over 2 years of the top 200 BSE listed companies was used. The trading strategy significantly outperformed the market

MEASURING AIRPORT CONNECTIVITY

Guide : Dr Mainek Mazumdar   [Oct - Nov 2013]

- Analysed US airports network using a model to measure Connectivity Index. Flight Scheduled data from 2007-2012 is used to find Connectivity index of 462 different types of airport network hubs
- Model was further used to understand, compare connectivity and its effects on large, medium and small network airport hubs
- Visualized the flight passenger volume data using Gephi to varify network relationships in between airport hubs

FORECASTING TOURISM DEMAND

Guide : Dr. Rahul Chhibber   **[**Sept-October2013**]**

- Forecasted the number of Foreign Tourist Arrivals and Domestic tourist arrivals for one year month by month in Sikkim
- Used monthly data (2005-2012) by applying different models like Multiple linear regression, Holt winters methods

ANTI CONTROL OF CHAOS USING LINEAR STATE OPERATION

Guide : Dr. V.V.M.S Chandramouli   [August - 2013]

- Simulated conversion of a non-chaotic Lorentz system into a chaotic system keeping the same perimeter values using MATLAB
- This Chaotification process was achieved by adding a linear state operation

POSITIONS OF RESPONSIBILITY

HEAD : FOOD AND BEVERAGES

- Led a 3 tier team of 15 volunteers arranging food and beverages for about 500 people including the guests, referees and sportsmen, in **Varchas 2014** (Institute's sports fest)
- Providing the food to sportsmen on the grounds, which were located at different locations in Jodhpur during the matches as per timings

EXTRACURRICULAR ACTIVITIES

ATHLETICS

- Member, **Athletics team**, **IIT Jodhpur.** Acted as Team Captain in absence of team captain during **49th Inter-IIT sports meet**
- Represented IIT Jodhpur in **48th** , **49th** ,**50th Inter-IIT sports meet** in various individual and relay track events
- Won gold medals in **800m** in Varchas-**13,14,15** continuously with improved timings every year
- Overall **7th** position in 50th **Inter-IIT** in **800m** race
- **2nd** position in the whole institute, in **mini Marathon 2014** organized by **District Magistrate (Jodhpur)** and **IIT Jodhpur**

OTHERS

- Worked as a member of **Resource Team** in institute's techno-cult fest IGNUS-13
- Worked as member of **IIT Jodhpur literature club** in the first year
- Worked as member of **institute's Election commission** for student body elections held in 2013