

Course Summary and Further Learning



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Course Summary



Resources and references

- R task view on time series analysis

Course and modules summary

- Three projects on real world data
- Time characteristics
- Tools for modeling and data visualization

Resources for Further Studies





R time series task view

- Organized list of all relevant packages
- A good place to start your research

Forecasting: Principle and Practice by Rob J Hyndman and George Athanasopoulos

- Free online textbook at otexts.org
- A theoretical approach of time series analysis and modeling

Multivariate time series analysis

- Library 'MTS'
- Multivariate Time Series Analysis in R by Ruey S. Tsay

R community at stackoverflow.com



Course Summary



Using R for Time Series Analysis

Beginning Time
Series Analysis
and Forecasting
with R course

The library
'forecast' and its
relevant functions

Course roadmap
and project
overview



Modeling Unemployment Rates



Time series with a trend

Models: ARIMA and Holt exponential smoothing

Visual comparison of models

Forecasting Inflation Rates

Seasonal decomposition

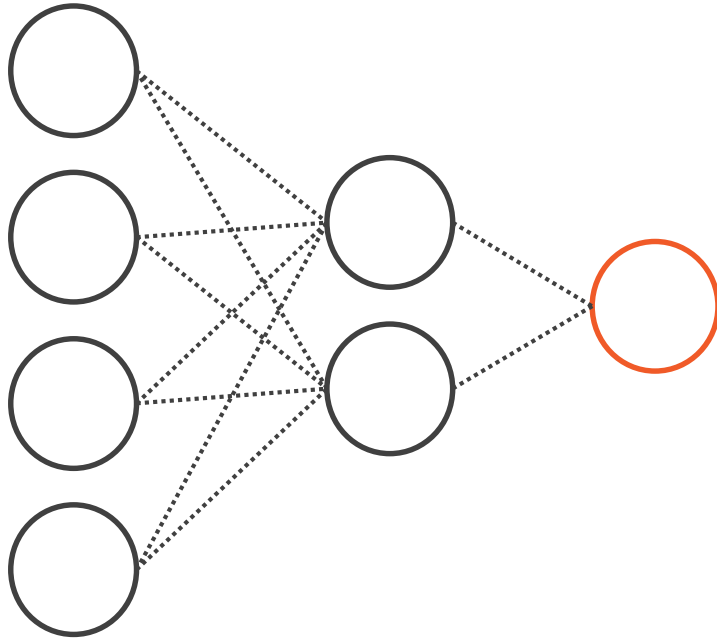
Exponential smoothing

SARIMA model

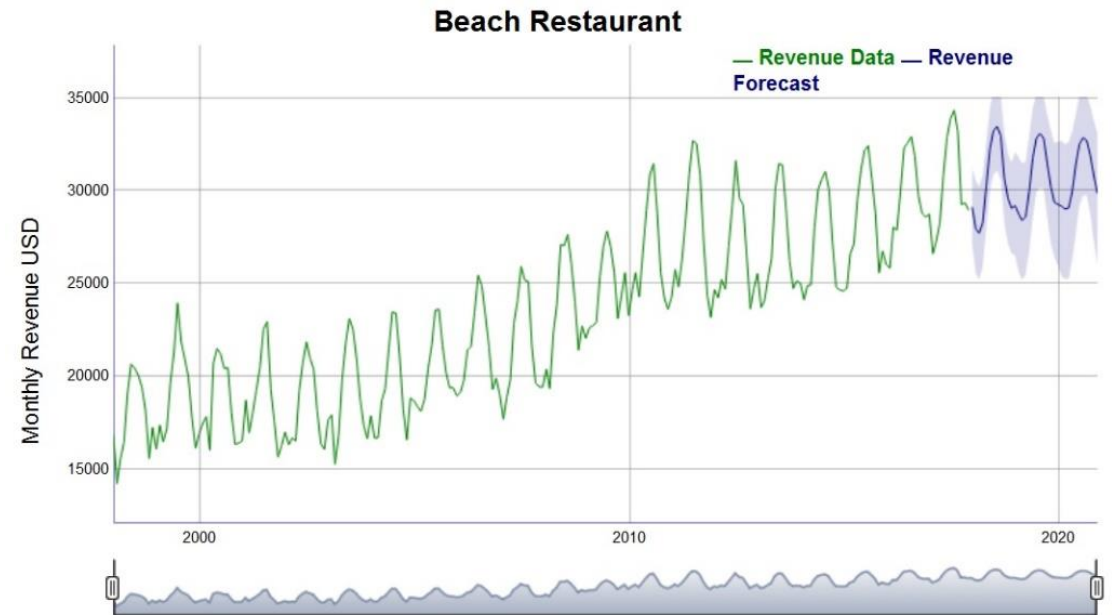
Comparison plot of models



Predicting Sales Using Neural Networks



Modeling and predicting sales with neural networks (nnetar)



Presenting results in an interactive data visualization (dygraphs)





Performing time series analysis on real world data

Applying the theory and techniques taught in the course, Beginning Time Series Analysis and Forecasting with R

Best wishes in your analytical career

