

Data Science at Flipkart - An Indian E-Commerce Company

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ABSTRACT

In this talk we will give a very brief overview of Flipkart, highlighting the major milestones in its journey so far and some latest market size numbers. We will enumerate some of the important data science challenges in an e-commerce company like ours. Finally we will cover one of the problems, demand forecasting, in some details to highlight some of our recent work: Accurate demand forecasts can help on-line retail organizations better plan their supply-chain processes. The challenge, however, is the large number of associative factors that result in large, non-stationary shifts in demand, which traditional time series and regression approaches fail to model. We propose a Neural Network architecture called AR-MDN, that simultaneously models associative factors, time-series trends and the variance in the demand

CCS Concepts/ACM Classifiers

- Theory of computation~Machine learning theory see:

Author Keywords

E-commerce; data science; neural network; demand forecasting; time series forecasting.

BIOGRAPHY

Mayur Datar is the Chief Data scientist at Flipkart and VP of engineering at Flipkart. Until recently he headed their search and recommendations group. He previously worked with Google Inc as a Research Scientist. His research interests are in data mining,

algorithms, databases and computer science theory. Prior to joining Google, Mayur obtained his doctorate degree in computer science from Stanford university and a Bachelor of Technology degree from I.I.T. Bombay. He was awarded the President of India, Gold Medal for being the most outstanding student of his graduating batch from I.I.T. Bombay. He has published several papers in renowned conferences like SIGMOD, VLDB, KDD, FOCS, SODA, WWW. He also serves on the review committees for these conferences and journals.



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