

Q&A Time

Sources:  
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Q&A Time

Enhancement of the system

- Integrate Diverse Data Sources
- Utilize Advanced Machine Learning and AI Techniques
- Improve Data Preprocessing Techniques
- Incorporate Adaptive Learning and Model Retraining



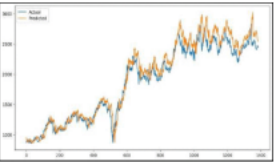
Recommendation systems in Finance



Thank you for your attention

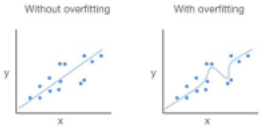
Recommendation system

- Recommendation systems are used worldwide in almost every scope of human interaction.
- In Finance recommendation systems recommend stock market offers.
- Offers are chosen based off of predicted values



Issues with the system

- Overfitting to Historical Data
- Data Quality and Availability Issues
- Model Complexity and Interpretability
- Scalability and Computational Demands



Time for "training"

- Model Complexity
- Size and Type of Data
- Computational Resources
- Data Preprocessing and Feature Engineering
- Training Approach

Training time according to model	
Model Type	Training Duration
Simple Models	Seconds to minutes
Tree-based Models	Minutes to hours
Basic Neural Networks	Hours
Advanced Neural Networks	Hours to days
Ensemble Models	Hours to days

System deployment conditions

- High-Quality Data
- Robust Preprocessing
- Well-Selected Features
- Effective Algorithms and Models
- Minimal Noise



Architecture of a simple system



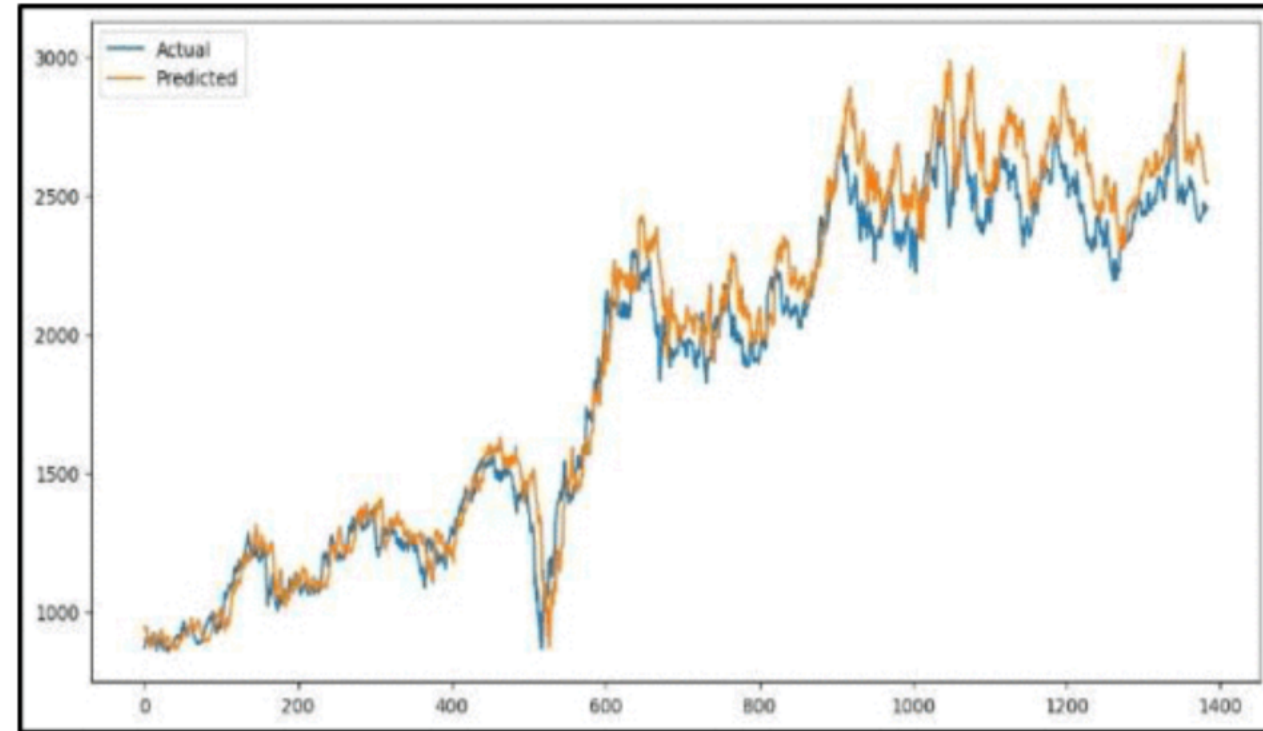
# **Recommendation systems in Finance**

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# Recommendation system

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# Architecture of a simple system



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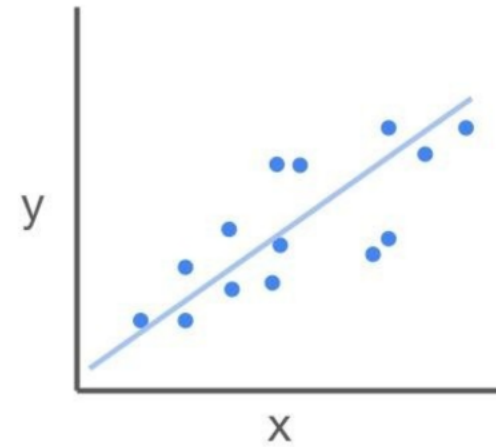
[Get the data](#) · Created with [Datawrapper](#)



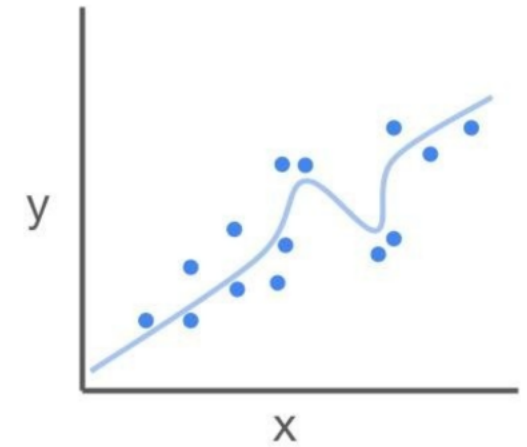
# Issues with the system

- Overfitting to Historical Data
- Data Quality and Availability Issues
- Model Complexity and Interpretability
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Without overfitting



With overfitting



# Enhancement of the system

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- Kumar, R. & Ravi, V. (2016). A survey of the applications of text mining in financial domain.
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Thank you for your attention