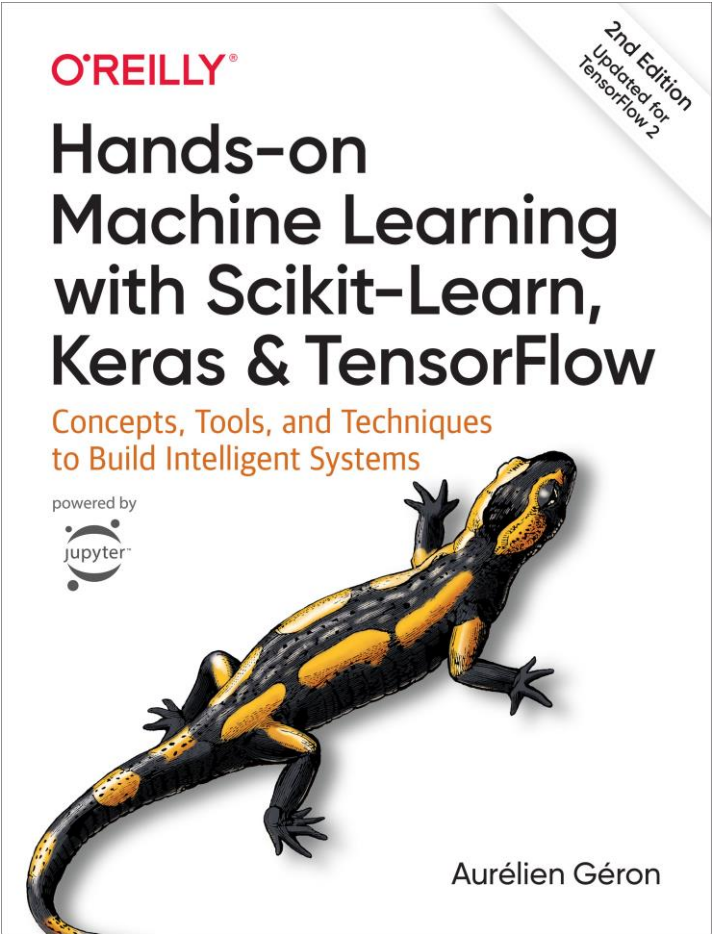
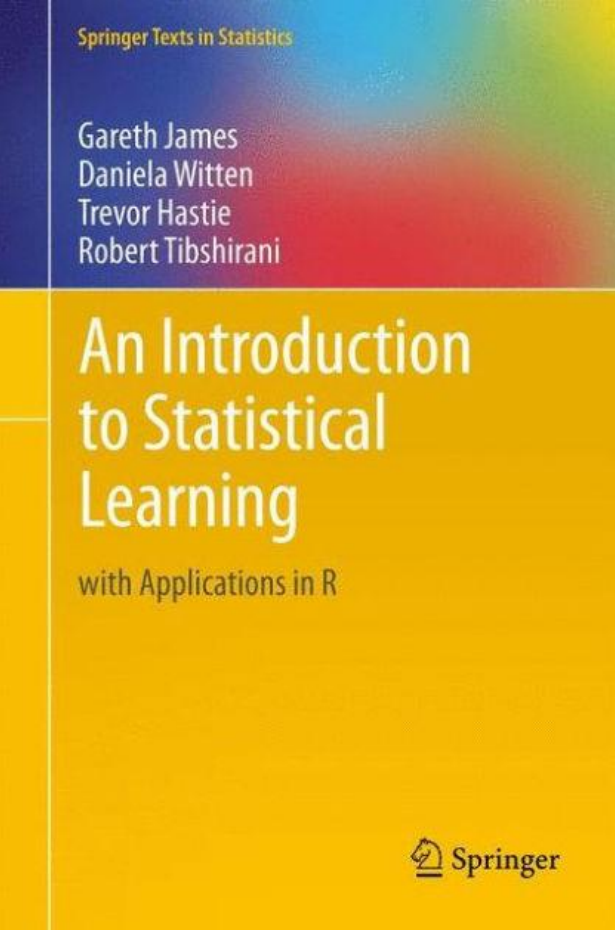


# *Data Science Concepts*

## **L00 : About The Course**

*by Ankit Rathi*

# References



CS109A Introduction to Data Science  
Pavlos Protopapas, Kevin Rader and Chris Tanner

Machine Learning  
by Andrew Ng

Topic of the slide

Section of the course

*Course*  
*Section*  
*Topic*

Content of the slide

Status of the course

In Progress  
Completed  
Upcoming

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## *About The Course*

Holistic coverage of data science field

Focus on conceptual understanding

Avoid reinventing the wheel

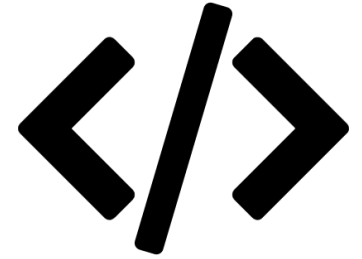
A picture is worth a thousand words

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**Mathematics** (Linear Algebra,  
Multivariate Calculus, Probability & Statistics)



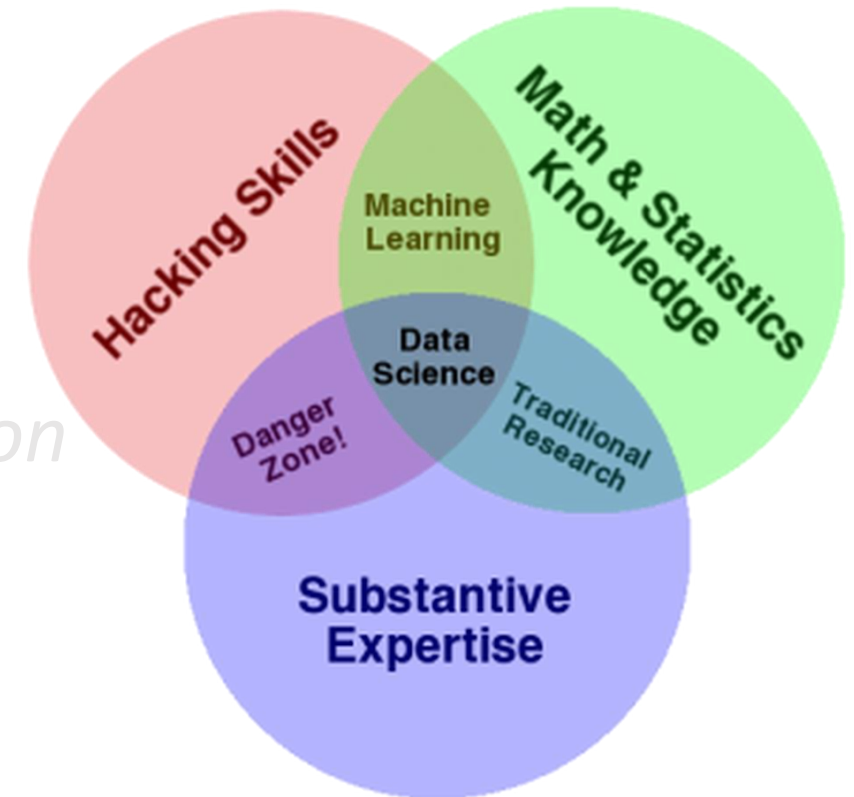
**Programming** (SQL, Python, PySpark)



**Business Domain**

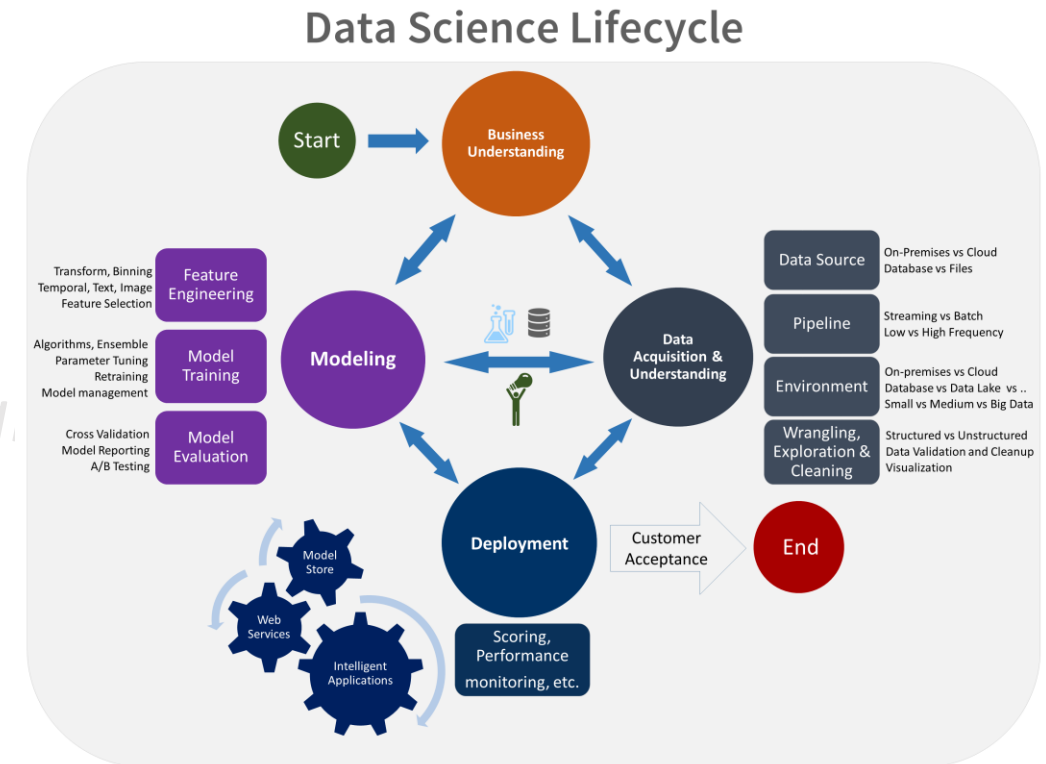


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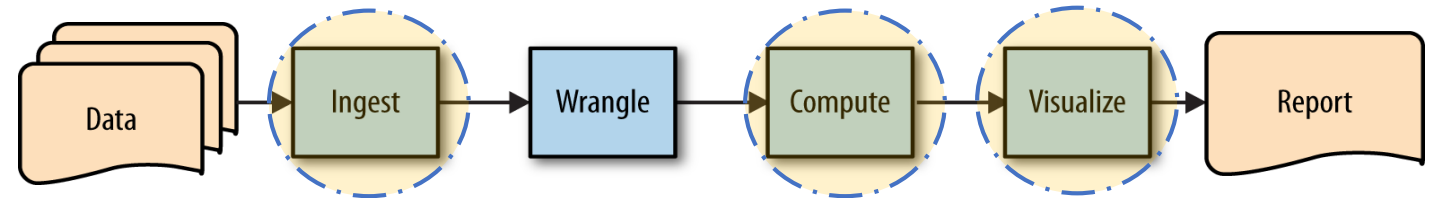
Source: <https://www.kdnuggets.com/2018/09/what-is-data-science.html>

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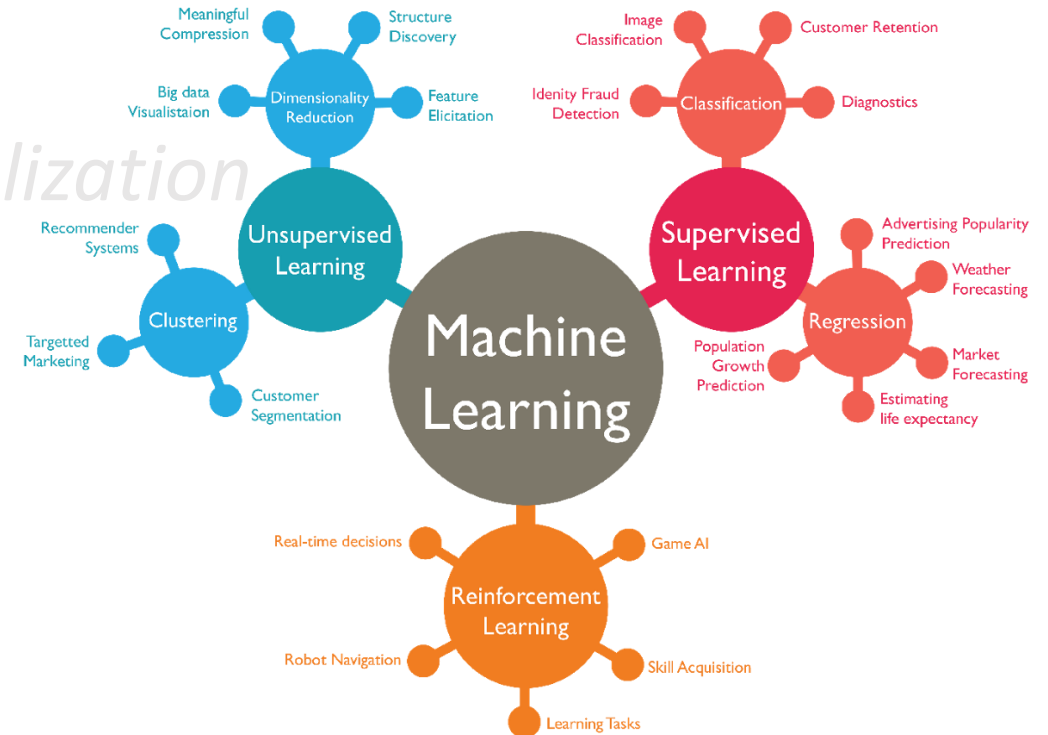


Source: <https://docs.microsoft.com/en-us/azure/machine-learning/team-data-science-process/lifecycle>

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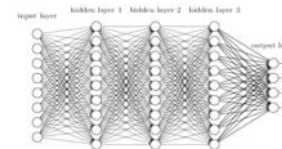


Source: <https://wordstream-files-prod.s3.amazonaws.com/s3fs-public/machine-learning.png>

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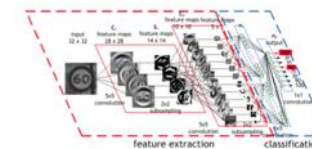
providing lift for  
classification and  
forecasting models

**Deep  
Neural  
Networks**



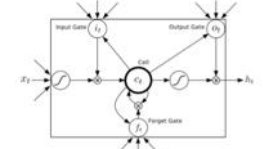
feature extraction  
and classification of  
images

**Convolutional  
Neural  
Networks**



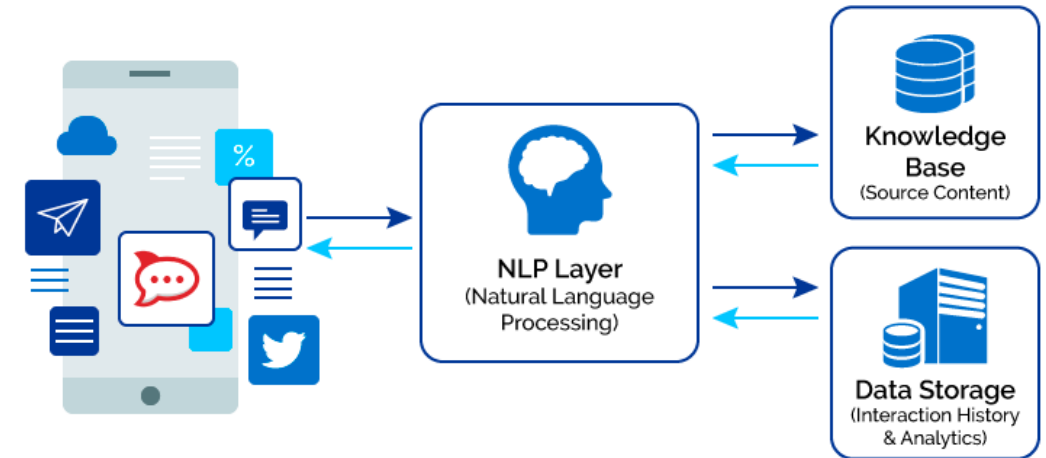
for sequence of events,  
language models, time  
series, etc.

**Recurrent  
Neural  
Networks**



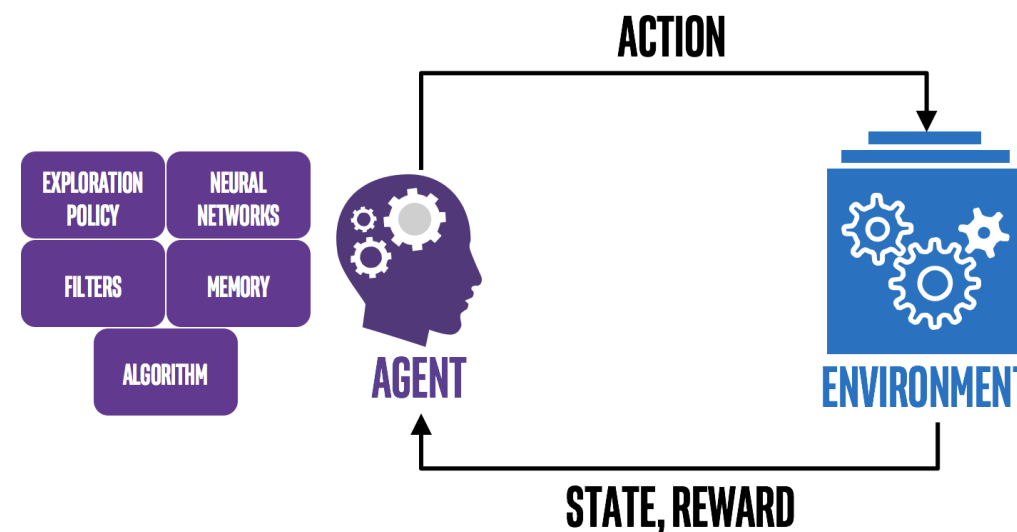
Source: <https://www.houseofbots.com/news-detail/11747-1-here-is-the-elementary-study-of-deep-learning-algorithms>

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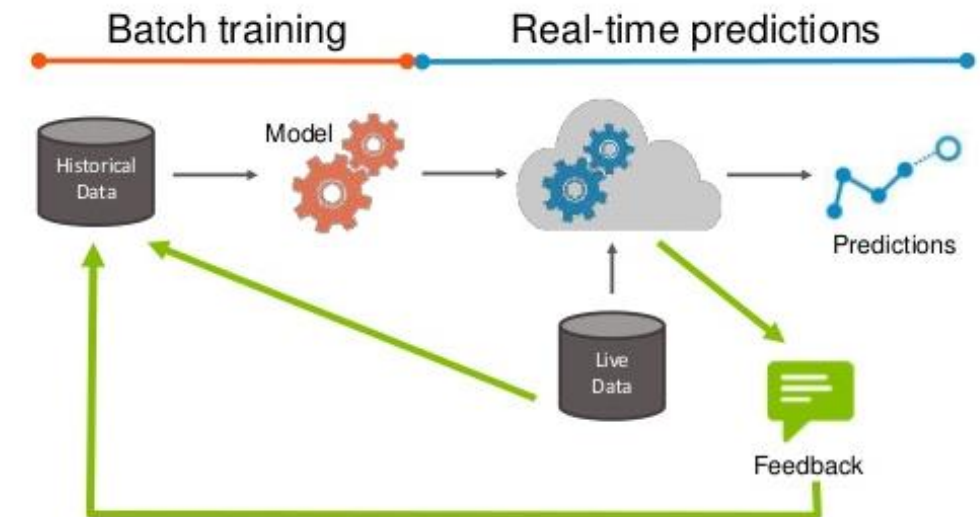
Source: <https://marutitech.com/what-nlp-reasons-everyone-retail-use-it/>

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Source: <https://nervanasystems.github.io/coach/images/design.png>

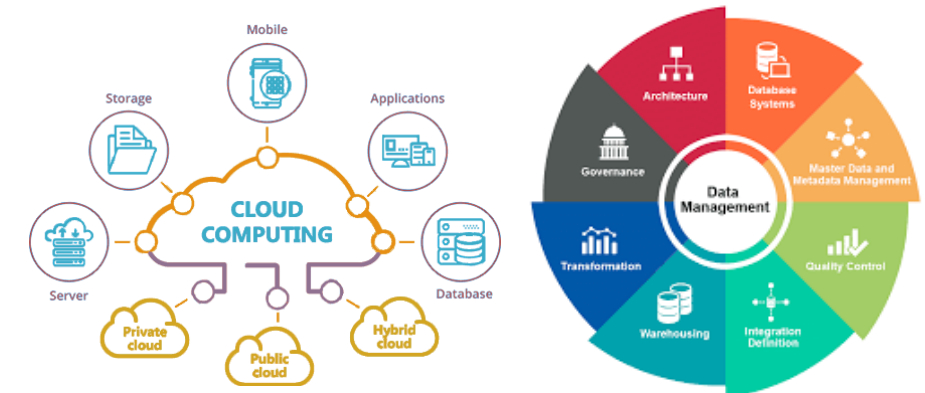
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Source: <https://www.slideshare.net/turi-inc/model-management>



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Completed  
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# Questions?

# Thank You