

Python and Applied Machine Learning

Introduction about Machine Learning & Python

Week - 1

About Me

- Research Scientist, Data analyst, Consultant, Entrepreneur, brand influencer, blogger, YouTuber, Love reading books
- Expertise in
 - Text Analytics & Data Science
 - Natural Language Processing
 - Speech and Signal processing
- email-id - monicamundada5@gmail.com
- Medium blog - <https://monicamundada5.medium.com/>
- YouTube - Tech Research



Outline

- Overview of Course – 5 weeks
- Introduction ML
- Applications of ML
- Installation of Python and Pycharm
- Python commands
- Time for coding...

Overview of Course

- 5 Week Course
- https://github.com/HackYourFuture-CPH/Machine_Learning

Why ML?



An aerial photograph of a dense railway yard with numerous tracks curving and intersecting. A train is visible in the upper right corner. The text "COMPLEX ORGANIZATIONS" is overlaid in the center.

COMPLEX ORGANIZATIONS

DEMANDING CITIZENS



DIVERSE, EVOLVING AND SOPHISTICATED THREAT

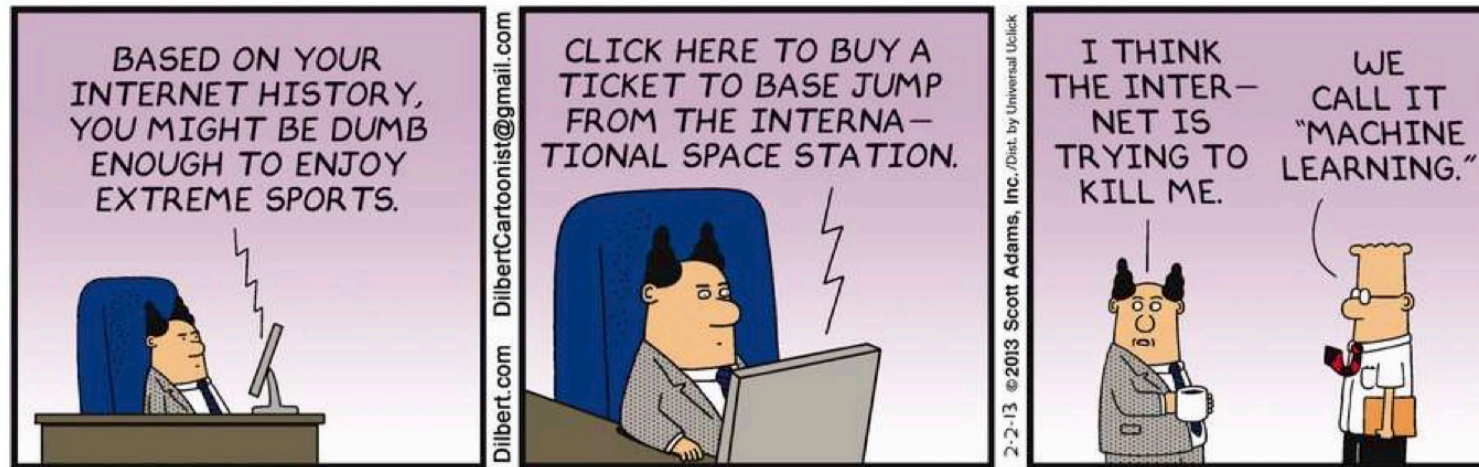


A wooden gavel with a gold band around its head is positioned diagonally across the frame. It rests on a dark, polished wooden block. In the background, several thick law books with dark covers and gold lettering are stacked. The scene is dimly lit, with a focus on the gavel and the books.

COMPLIANCE & REGULATIONS

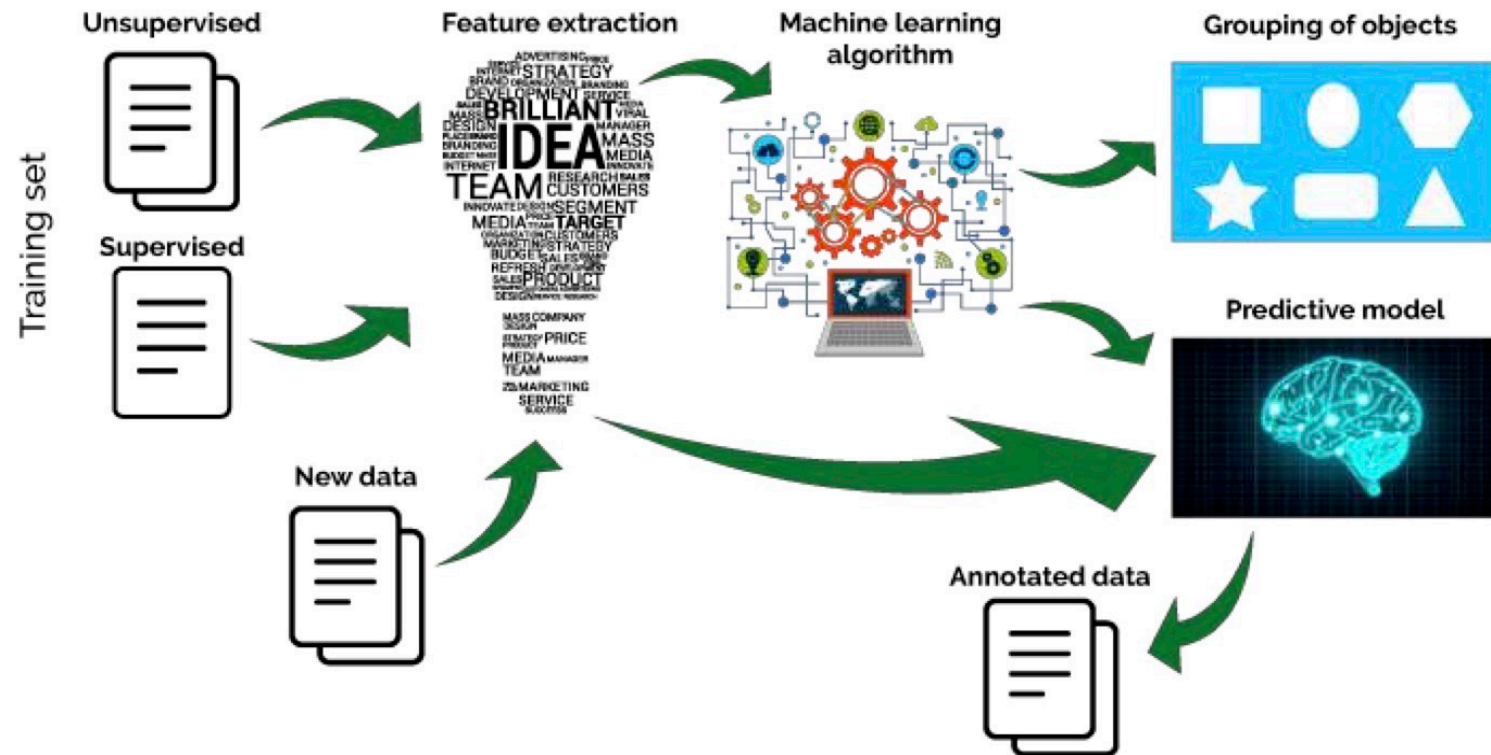
Machine Learning

- Machine learning is the field of study that gives computers the ability to learn without being explicitly programmed.
- In simple term, Machine Learning means making prediction based on data



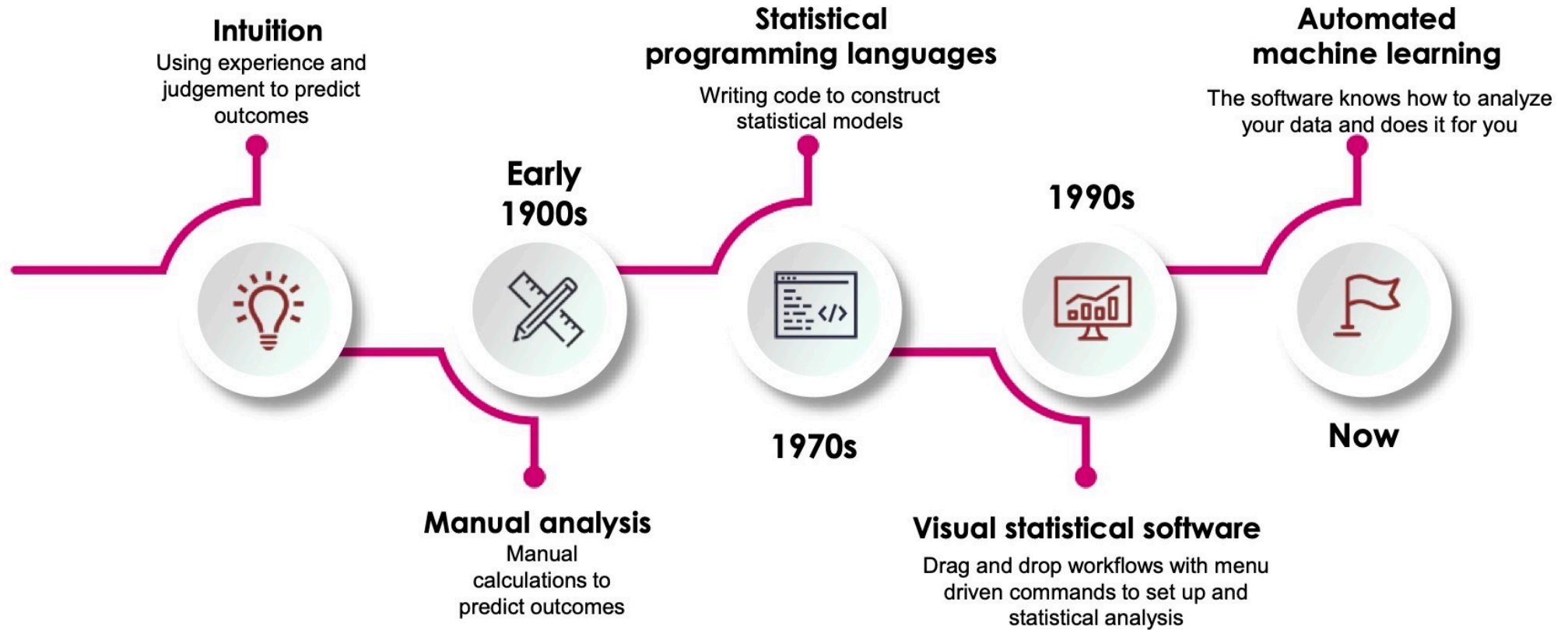
Dr Ganesh Neelakanta Iyer

Machine Learning

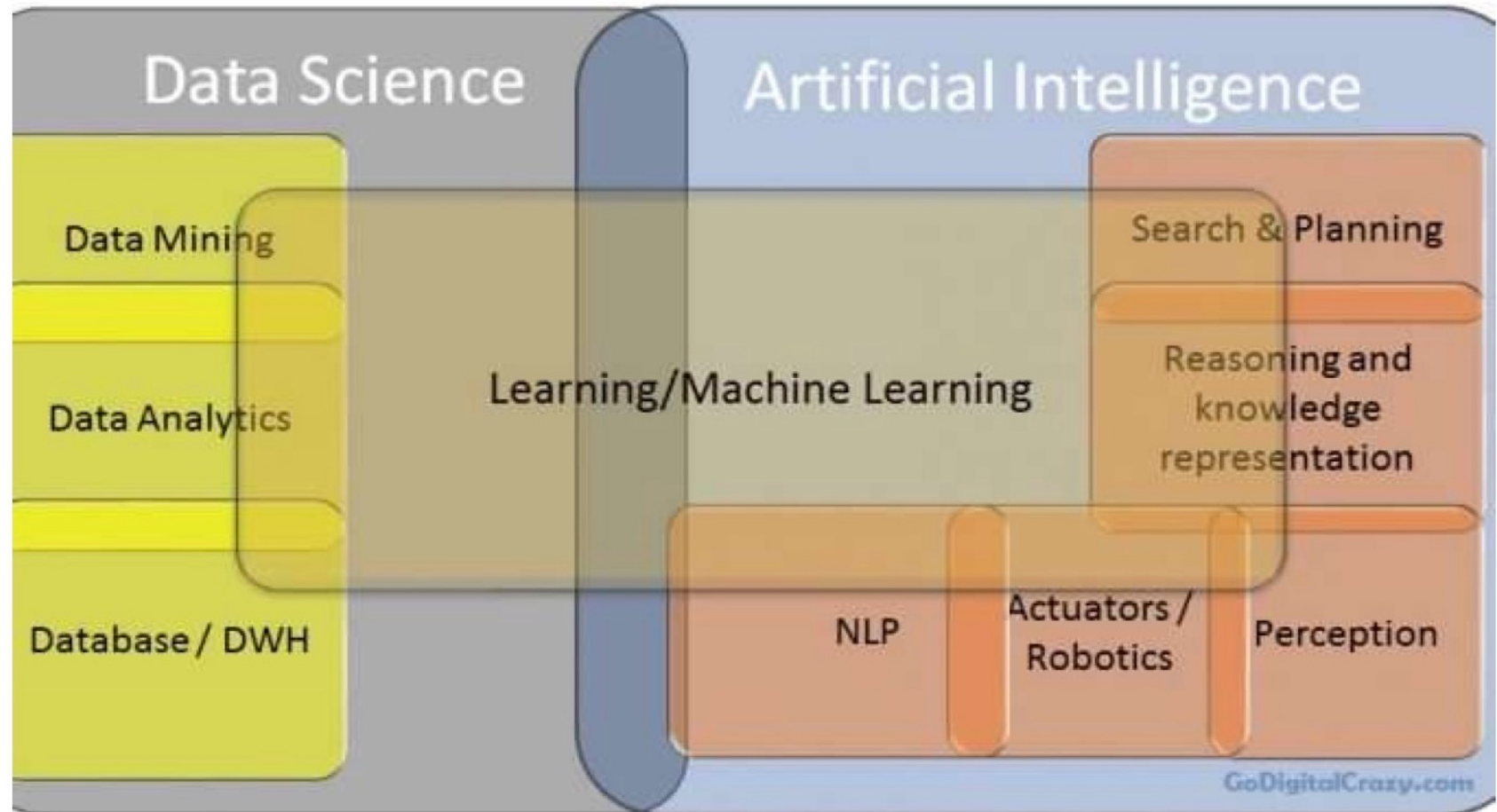


- **A quick history.**

From intuition to machine learning



AI vs ML

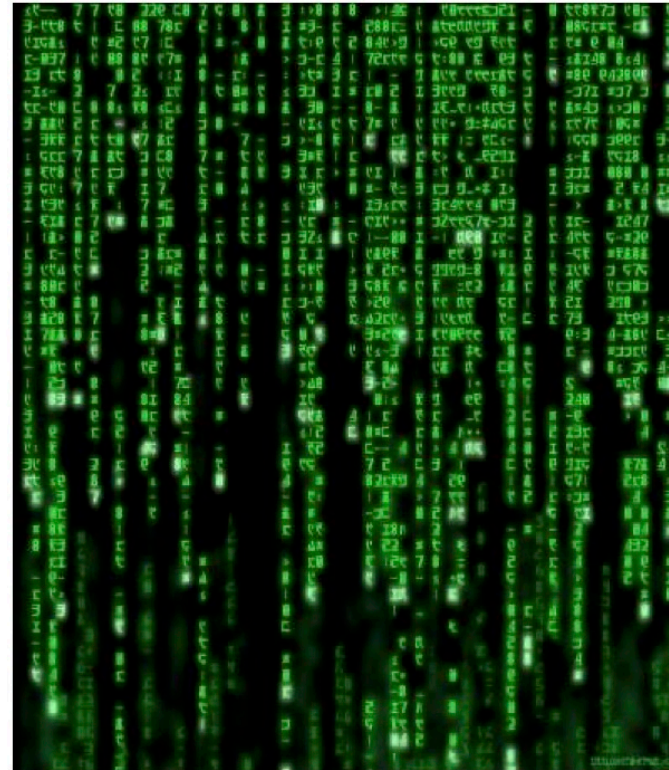


Why Machine Learning is Hard

You See

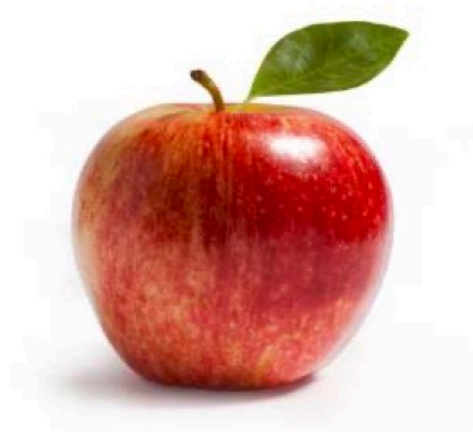


Your ML Algorithm Sees



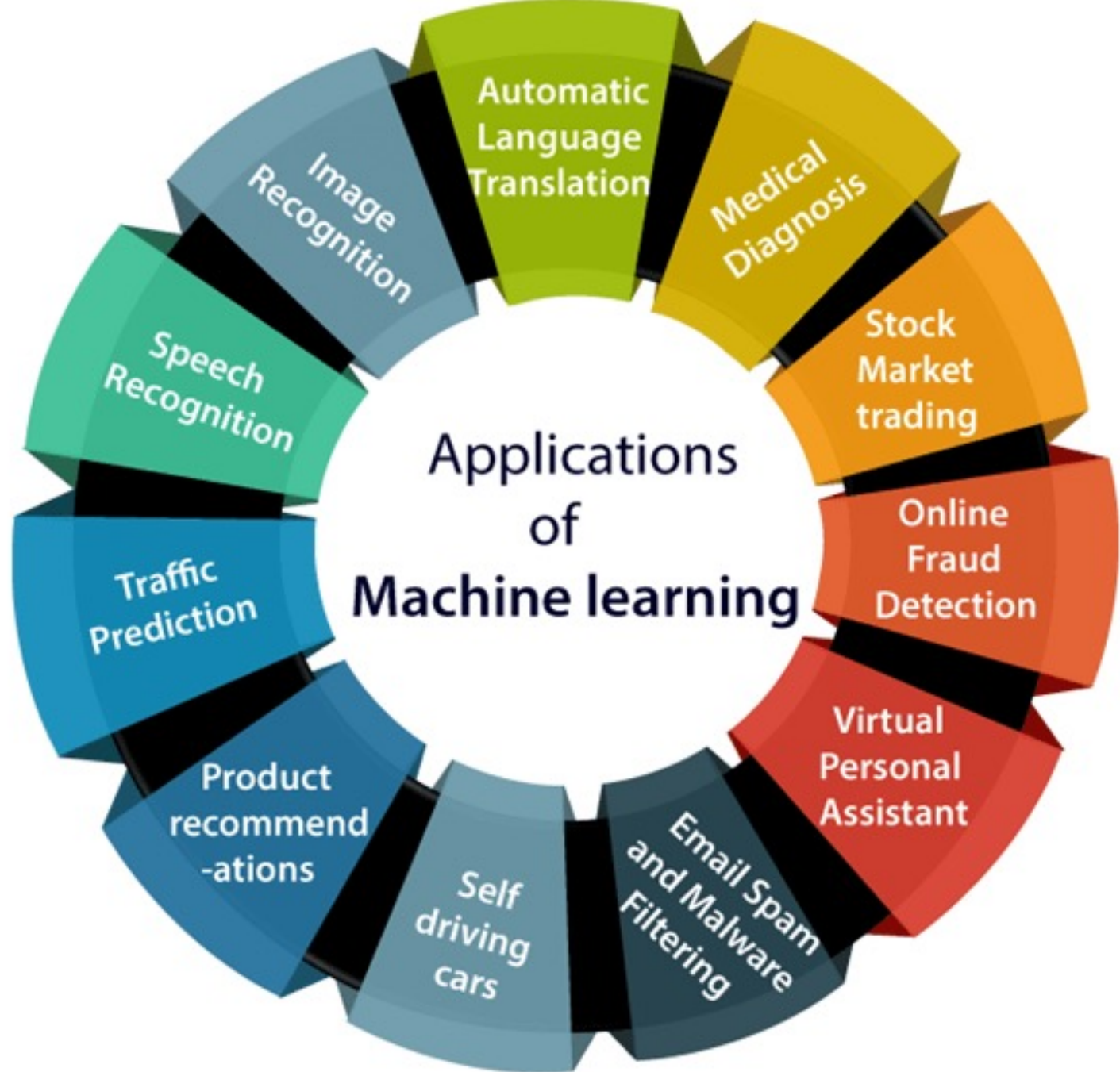
- **Why machine learning is hard?**

Learning to identify an 'apple'?



	Apple	Apple corporation	Peach
Colour	Red	White	Red
Type	Fruit	Logo	Fruit
Shape	Oval	Cut oval	Round

ML Applications



Installation of Python

- Ready to code?

Python Commands

- Variables
- Comments
- Receiving Input
- Strings
- Arithmetic Operations
- If Statements
- Comparison operators
- While loops
- For loops
- Lists
- Tuples
- Dictionaries