

Machine Learning and How its Woks

Nwigbo Nusua Stella
Department Of Computer Science
Research Scholar
Jain University
nwibgo4surestella@gmail.com

Dr. Madhu B.K
Hod Of Information Science
Engineering
R.R Institue Of Technology
Hesaraghatta Main Road
dr.madhubk@outlook.com

Julius Wosowei
Research Scholar
Computer Engineering
Jain University

Abstract:- Machine learning is a subfield of computer science and statistics that deals with the construction and study of system that can learn from data.

Key Words:- Machine Learning, Effectiveness, Constructive, Study, Data

I. INTRODUCTION MACHINE LEARNING CONCEPTS

- Information extraction
- Application area
- Classification systems
- Prediction system
- Recommendation engine
- Pattern recognition
- Data representation

Decision making systems.

II. HOW MACHINE LEARNING WORKS

```
graph LR; A[Input Data] --> B[Pre-process Data]; B --> C[Data-Foot print]; C --> D[learning system]; D --> E[Decision and Knowledge];
```

Data---processing—Information.

- Data---These are raw fact for which we carry out our work.
- Processing----This is the acting stage on the manipulated data supplied by individuals to the computer system according to the program that run on it.
- Information----These are the processed data ,the final product, the organize materials.

III. DATA TECHNIQUES

- The techniques used in obtaining data from different sources for processing is called data capture techniques.. Data are drawn from different sources such as examination answer sheets, from credit cards, purchased items, from cheques .etc
- The process of obtaining data is called data capture.

Information extraction

- Non expert user---query—user interface— inference engine—knowledge base----knowledge from the human expert
- These are the function of the expert system.

IV. APPLICATION AREAS

- Diagnostics and prognostics
- Healthcare

- Finance
- Robotics
- Automation system
- Machine computing vision
- Neuroscience
- Security.

V. THE ADJACENT AREA OF MACHINE LEARNING

- Statistics
- Pattern recognition
- Data minig
- Database
- Machine learning
- Knowledge
- Neuro computing
- Artificial intelligence

VI. MACHINE LEARNING, PRACTICAL DATA MINING AND AI

- Machine learning-----practical data mining—
Efficiency, processing, power and management .
- Machine learning ---- AI—Intelligence and
reasoning capability.
- Data mining/analytics----Pattern discovery,
massive data hand on
- Machine learning—Algorithms statistics
probability, ,estimation, accuracy errors prediction
- Artificial intelligence –Reasoning inference
behaviour, understanding human intelligence.

VII. CONCLUSION

Machine learning is very importance because of its application and adjacent area.
Also its cut across every area of studies. Every area make use of machine learning in one way or the other.

RECOMMENDATIONS

- That there should be an awareness and promotion of machine learning in all the educational system
- That there should be an effective introduction of machine learning at all level
- That there should be documentation on machine learning towards improving the knowledge base of the system.

REFERENCES

- [1] Alberio.R.(1990),AI/expert system(www.google.com)
- [2] N.Garcia.R.A.Perez.B.G. Silverman.et all(1993)Teaching machine learning and AI courses(www.google.com)
- [3] Dr.Shivanand M.H(2014),Unravelling the hidden treasures of software engineering,institute of technology bangalore
- [4] Boss.R.W.(2003),What is machine learning www.ericdigest.org/pre.9220/machine.html.