Silence Please!
The Machines are Reading (and Learning)!

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Intelligence

Mental quality that consists of

1) abilities to learn from experience,

2) adapt to new situations,

3) understand and handle abstract concepts, and

4) use knowledge to manipulate one’s environment

____________________________________________________________________________________

Ability to

1) perceive or infer information, and to retain it as knowledge

2) to be applied towards adaptive behaviors within an environment or context
Artificial Intelligence (AI)

Capability of a machine to *imitate intelligent* human behavior

Theory and development of computer systems able to perform tasks that normally require human intelligence, such as **visual perception, speech recognition, decision-making, and translation between languages**

When a machine mimics "**cognitive**" functions that humans associate with other human minds, such as "**learning**" and "**problem solving**" – *Russell and Norvig, 2009*

AI is ‘programming computers to do things, which, if done by humans, would be said to require “intelligence’ (MIT Press Essential Knowledge Book on Machine Learning, cited by Chris Bourg)
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Human Brain

Motor Area
- control of voluntary muscles

Sensory Area
- skin sensations (temperature, pressure, pain)

Frontal Lobe
- movement
- problem solving
- concentrating, thinking
- behaviour, personality, mood

Broca’s Area
- speech control

Temporal Lobe
- hearing
- language
- memory

Brain Stem
- consciousness
- breathing
- heart rate

Parietal Lobe
- sensations
- language
- perception
- body awareness
- attention

Occipital Lobe
- vision
- perception

Wernicke’s Area
- language comprehension

Cerebellum
- posture
- balance
- coordination of movement

Hearing

Vision

Language

Memory

Thinking, Concentrating

Comprehension

Perception

Problem Solving

Speech

Image sourced from https://www.humanbrainfacts.org/
Search, Identify, Curate - Knowledge Package

- Strategic Documents and Evaluations
- WB Knowledge Projects
- WB Lending Projects
- Project Description
- External Research and Data
- External Projects
- Task Team Leaders and Specialists
The Rural Infrastructure Project for Nepal aims to strengthen the institutional capacity of a decentralized local governance system in its planning and managing capabilities to improve the quality, efficiency, and sustainability of rural roads in selected districts with active participation of project beneficiaries. There are four project components. The first component supports routine maintenance, periodic maintenance, rehabilitation and spot improvement of existing district roads/trails and other rural infrastructure in eight selected districts. The second component provides supervision and design of civil works. The third component procures basic equipment for logistical support including four-wheel drive pickups, motorcycles, and computers and photocopiers. The fourth component funds consultancy services to help the institutional capacity of development departments and entities at the local and national levels, trains staff and contractors, funds project monitoring and evaluation, including a community-based performance monitoring system.
1. Rural Infrastructure
2. institutional capacity
3. decentralized local governance system
4. sustainability of rural roads
5. active participation of project beneficiaries
6. routine maintenance of roads
7. periodic maintenance of roads
8. rehabilitation of roads
9. district roads/trails
10. rural infrastructure
11. design of civil works
12. equipment for logistical support
13. institutional capacity
14. development departments
15. community-based performance monitoring system

1. Rural Infrastructure + Nepal
2. institutional capacity + Nepal
3. decentralized local governance system + Nepal
4. sustainability of rural roads + Nepal
5. active participation of project beneficiaries + Nepal
6. routine maintenance of roads + Nepal
7. periodic maintenance of roads + Nepal
8. rehabilitation of roads + Nepal
9. district roads/trails + Nepal
10. rural infrastructure + Nepal
11. design of civil works + Nepal
12. equipment for logistical support + Nepal
13. institutional capacity + Nepal
14. development departments + Nepal
15. community-based performance monitoring system + Nepal
External Research – Step 3 - Curate

Search -> Aggregate -> Curate -> Share

Unsupervised Machine Learning Algorithm
Thank You