

Amazon MTURK

What is MTURK?

*Amazons web service for crowdsourcing data from human participates.

*Partially -interactive,with integrated tools, such as ability to draw bounding boxes.

*Paid service

Terms used in MTurk

- Requester- Person requesting work(you)
- worker-Person who completes job(can select job based on pay) human sub
- Requester create a requester account and worker create worker account
- HIT(Human Intelligence Task)
- 1. MTurk integrated experiment:each task/question the worker must complete(1 batch usually has multiple HITs)
- External experiment:each published job(batch) the worker must complete (1 batch has 1 HIT)
- Assignment: How many works you want to complete your work?

Two ways to do experiments

- 1.use MTurk's integrated tools to design your experiment
 - 1.survey
 - 2.image classification
 - 3.image tagging
 - 4.bounded boxes
 - 5.Audio/video
- 2.Design experiment externally
 - 1.external surveys(e.g google form)
 - 2.link to a virtual 3D game hosted on the web

Mechanical Turk is a website owned and operated by Amazon since **its creation in 2005**. The name comes from an 18th century chess-playing device commissioned by Austrian Empress Maria Theresa. Challengers competed against the Turk, believing they were competing against an automated machine



How it works?



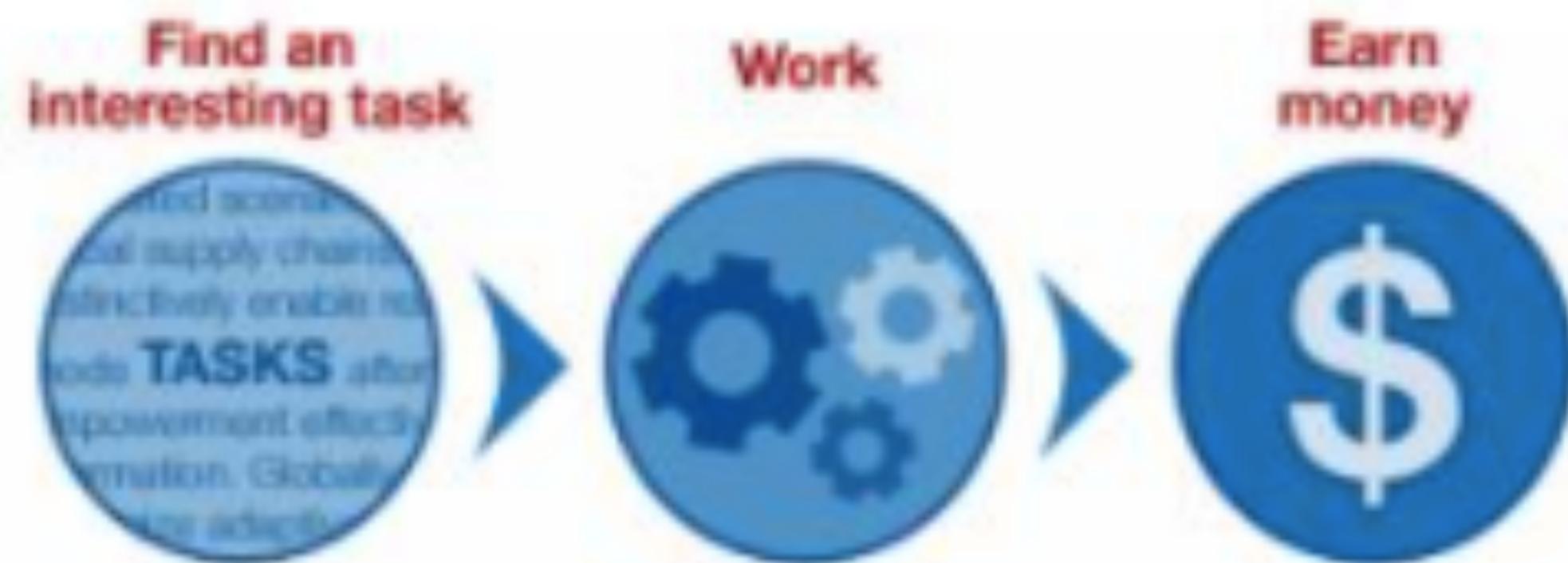
USE CASE

1. MTurk can be a great way to minimise the costs and time required for each stage of ML development.
2. It is easy to collect and annotate the massive amounts of data required for training machine learning(ML) models with MTurk. Building an efficient machine learning model also requires continuous iterations and corrections.
3. Another usage of MTurk for ML development is human-in-the-loop(HITL) where human feedback is used to help validate and retrain your model

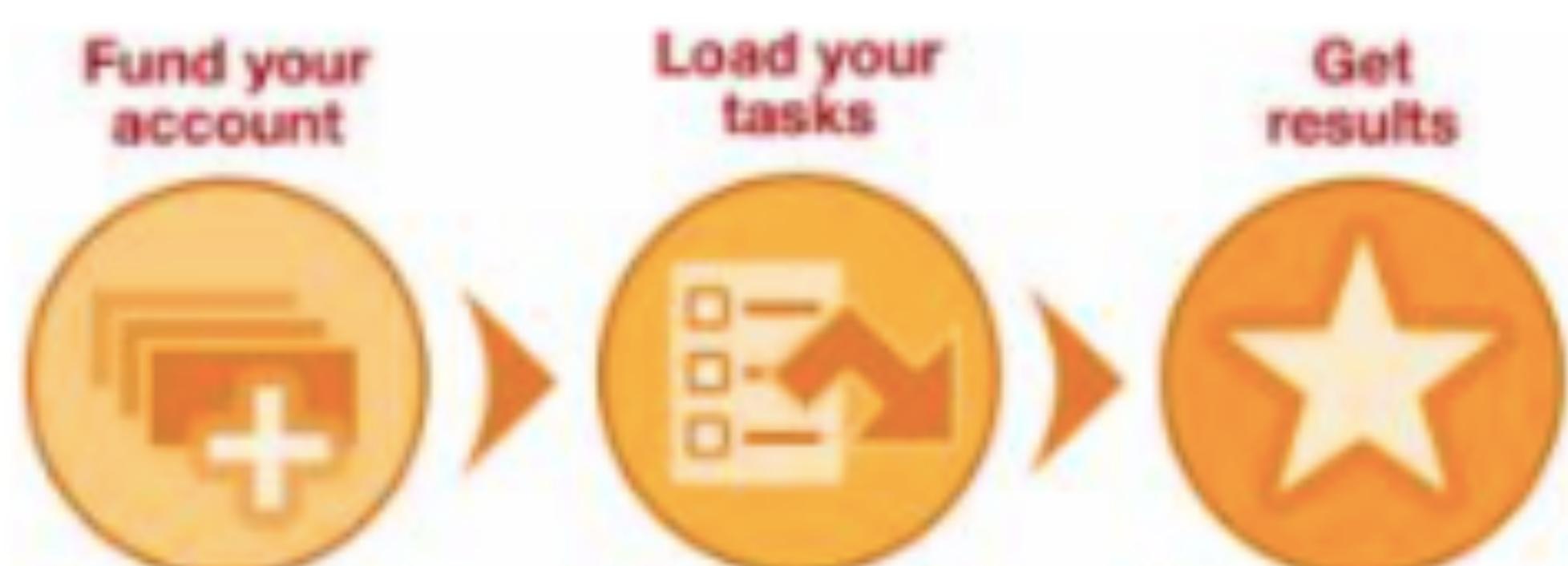
Worker vs Requestors

Turk Workers & Requestors

“Turkers”



Requestors



Testing environment for building/testing experiment for free
we use Requester sandbox and worker sandbox

Requester Sandbox

<https://requestersandbox.mturk.com/developer/sandbox>

Worker Sandbox

<https://workersandbox.mturk.com/>