

Global Conference on Measuring New Forms of Employment

Brussels, 4 - 5 July 2024



#MeasuringEmployment

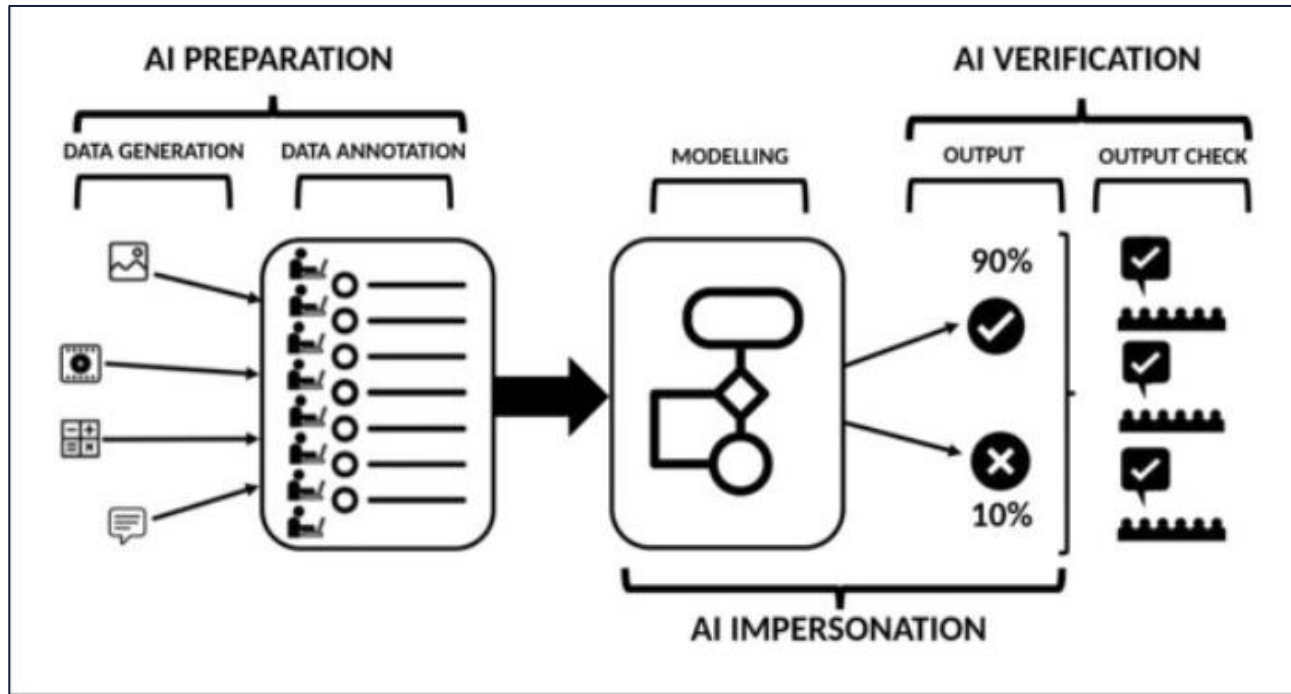
New and emerging tasks and occupations with digitalisation

Session 3

Uma Rani, Research Department
International Labour Office, Geneva



Emerging tasks related to the development of AI



- AI preparers
- AI verifiers
- AI impersonators (invisible workers)
- AI modellers (software programmers)

Tubaro, P., Coville, M. & Casilli, A. A. 2020. [The trainer, the verifier, the imitator: Three ways in which human platform workers support artificial intelligence](#). *Big Data & Society*, 7(1).

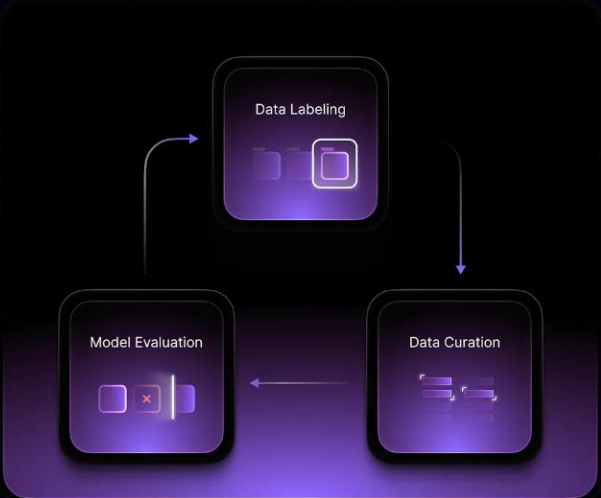
Emerging tasks related to the development of “autonomous” vehicles

- Data labellers ≠ labellers
 - Unskilled workers sticking labels on products
 - Data labelers = data annotators
- Data curators

The Automotive Data Engine

Scale's Automotive Data Engine has everything you need to drive model improvements with data.

- **Data Labeling**
Industry-leading annotation of 2D and 3D data sourced from multiple sensors. Achieve high quality data at low cost from ML-assisted labeling workflows, best in class operations, and advanced labeling interfaces.
- **Data Curation**
Explore both labeled and unlabeled data. Understand dataset distribution, curate data matching target scenarios and send data for annotation.
- **Model Evaluation**
Analyze the performance of your machine learning models. Explore model metrics, identify model weaknesses and evaluate your model on scenario tests.

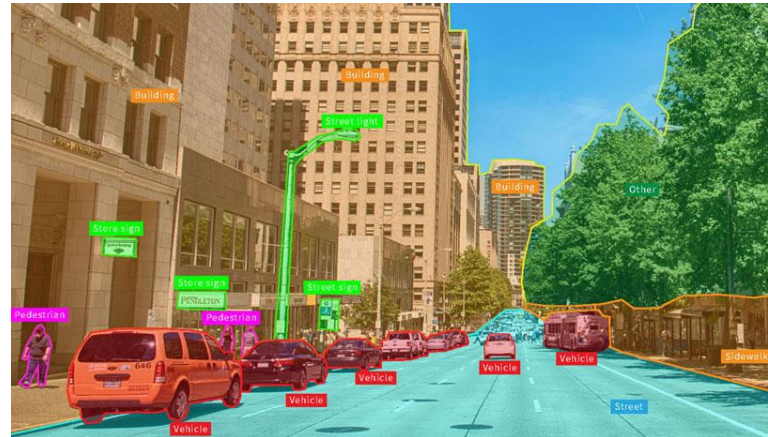


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graph TD; A[Data Labeling] --> B[Data Curation]; B --> C[Model Evaluation]; C --> A;
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Source: Scale

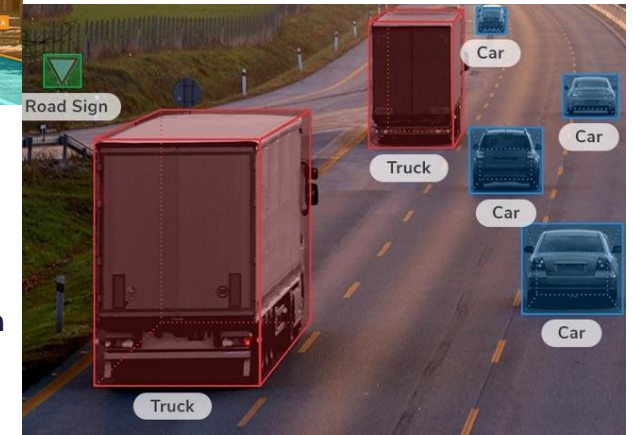
Data labelling or annotation tasks for “autonomous” vehicles

- Annotation industry or companies transform large raw datasets into training data by identifying attributes and adding metadata
- Typical data annotation tasks include
 - drawing bounding boxes, identifying semantic and polygonal segmentation, annotating general images and video, labelling entities, and categorizing content and text
- Semantic segmentation is like pixel labelling everything in an image such as trees, sidewalks, dogs, pedestrians, traffic lights, pedestrians are tagged precisely tagged

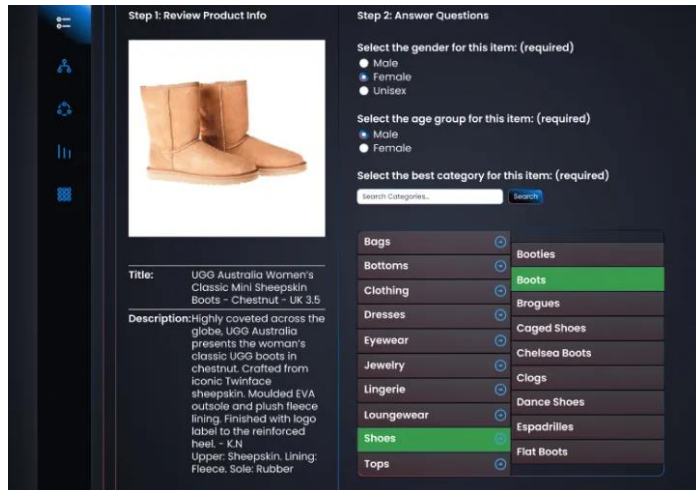


Bounding box: Drawing a box around a target object in visual data. Bounding boxes can be 2-D or 3-D.

Source: Cloudfactory



Data annotation tasks



Categorisation

Source: Appen



Landmarking: Plotting characteristics in the data, such as eyes and nose in an image used for facial recognition.

Source: Cloudfactory

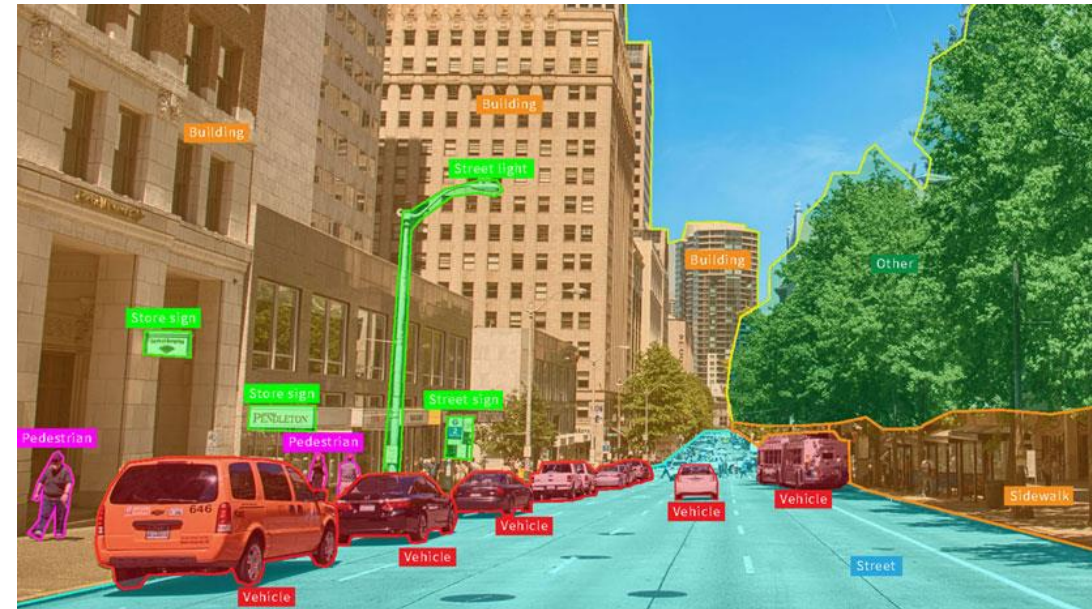


Polygon: Outlining the highest vertices, or points, of the target object to reveal its edges. Polygons are used when objects are irregular in shape, such as homes, areas of land, or topographical details.

Source: Cloudfactory

New occupations in data labelling or annotation tasks for “autonomous” vehicles

- Data Annotator
- Data quality analyst
- Engineer data operations
- Annotator and validator
- Data annotation engineer
- Process executive
- Annotation engineer
 - Data Scientist
 - Natural Language Processing
 - Data analyst
 - IT quality and testing professionals
- Skills: Postgraduates with engineering and computer science
- Visibility and invisibility of workers



Source: Cloudfactory



Emerging tasks: AI Impersonators

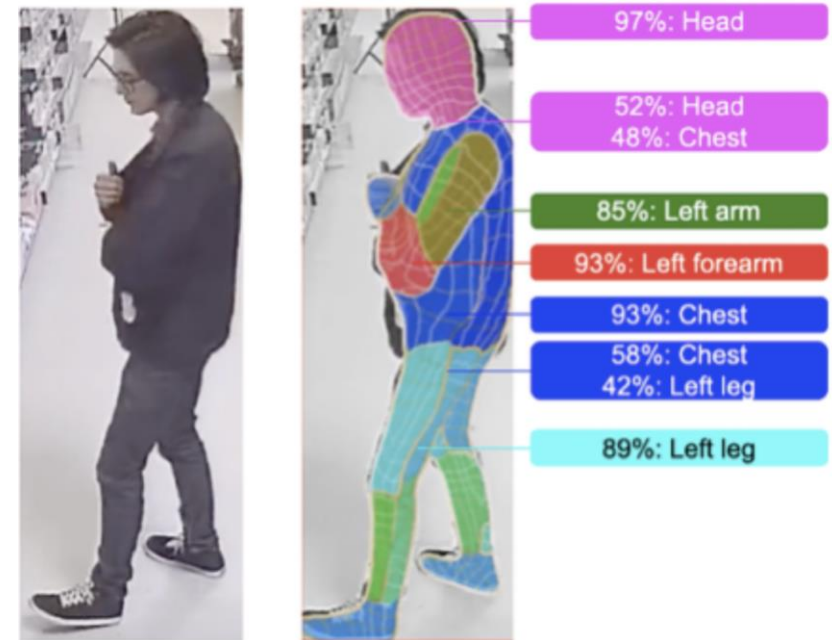
Invisible worker behind “automated” surveillance

- Task is to remotely monitor thefts, etc. using CCTV
- Long training to master this task
- Task similar to surveillance, like being a guard or a security agent from a distance location

Humans performing ‘bot’ work

- chatbots for calendar scheduling services, spending 12 hours a day doing mind-numbing work

- Visibility and invisibility of workers



C. Le Ludec, M., Cornet, M., A. A. Casilli (2023). [The problem with annotation. Human labour and outsourcing between France and Madagascar. *Big Data & Society*, 10\(2\).](#)

Emerging tasks: Content moderators

Content moderation for Web 2.0 and social media platforms

- Tasks outsourced by big tech companies to BPOs in developing countries
- Human verification of content involving objectionable material
 - pornography, assault, animal abuse, hate speeches,
- Depending on the content queue (such as hate speech, nudity, self-harm, etc.) the frequency of the psychologically distressing content may be higher

- Skills: Postgraduates with engineering and computer science
- Issue of valuation of such tasks

Content moderation in Large Language Learning Models (LLLMs)

- Human verification remains crucial for accountability
- Workers used to address toxicity issues such as its violent, sexist, or racist responses (Perrigo, 2023).
- Workers often paid less than US\$2 per hour



Emerging tasks: Data generators for AI training

NEW Record 40 videos of drawing letters and digits in the air using your laptop camera Jobs: 594
Time limit: 120 min
EUR 1.20 per job Start

Instructions


When accepting this task, you will see the following interface:

You have recorded **0** of **40** gestures Submit Task

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

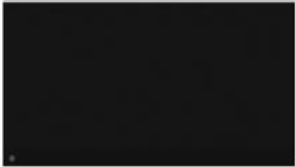
Drawing the letter A in the air - Example

Please use either hand to draw in the air



Drawing the letter A in the air - Your recording

Please use either hand to draw in the air



Back Next

When recording each of the 40 videos, please do the following:

- Play the video on the left, which shows an example of the letter or digit.
- Press the red recording button on the right hand side.
- Wait until the countdown has finished.
- Perform draw the letter within 3 seconds.
- Replay the video to make sure that the recording has worked, that the letter or digit is clearly visible and that it is not cut off at the beginning nor at the end.
- If needed, re-record the video by pressing the record button again.
- If the video is ok, please proceed to the next one.
- When you have recorded all 40 videos, the "Submit Task" button becomes active at the top and you can finish up your submission.

Some Hints:

- Your work will be reviewed by our support team and depending on the number of submissions we get, it can take some time until you receive your payment.
- Please make sure that the letters and digits are performed as shown in the example video. However, you may use either hand and you should draw the letter like you would normally write it on paper.
- Please make sure to not confuse left and right (which can easily happen because of the "mirroring" setup)

IMPORTANT: Can I do multiple submissions?

- Yes, you can, but only do up to 10 submissions.
- For each submission, please vary the background behind you by moving your laptop or computer to a different location.
- For each submission, please vary the lighting conditions a little bit.
- For each submission, please vary the distance to the camera a little bit.
- Ideally, have a different person draw the letters / digits for every submission.
- Please keep in mind that the support team might reject your submission if they feel that the submissions are too similar!

Source: Eurostat



Emerging task: Search engine optimizers

Promotion of products, services, websites, etc. (international outsourcing)


- ▶ Call centre and BPO companies in developing countries
- ▶ Clickers or search optimizers
 - ▶ Skills: Postgraduates with engineering and computer science
 - ▶ Visibility and invisibility of workers

Website: Explore

Work done: 82/85
You will earn \$0.12
Task takes less than 3 min to finish
Job ID: [REDACTED]

Employer: [REDACTED]
[add to Exclude List](#)
[add to Include List](#)
Tasks will be rated within **2** days

You can accept this job if you are from any of these countries:

 Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, Ireland, Italy, Netherlands, Norway, Portugal, Sweden

Search, Click, and Engage) → Click 3x

? What is expected from Workers?

1. Find Website Link in the image attached. Visit that Website. Select Your Location and stay for one minute on landing home page.
2. You will find 6 categories on home page (Services, Real Estate etc...) click on any one category (example: Services)
3. Stay on the landing page for one minute. There will be nine Block links (results) connected to that category. Click on any one link
4. You will be taken to another page. Stay on that page for one minute. You will find 'More Items you might be interested' Block in that Page. Click on any one Item of it
5. You will get another page. Stay on that page for Two minutes

! Required proof that task was finished?

1. URL of the final page you visited
Attached file: [COM.jpg](#)

Issues for discussion

- ▶ Skill requirements for tasks or occupations
- ▶ Challenges of unpaid work in all contexts
- ▶ Penetration of algorithmic management practices
- ▶ Fragmentation of tasks
 - ▶ Development of computer systems, programming, etc.
 - ▶ Legal services
- ▶ “Valuation” for emerging and new tasks
- ▶ Moral and ethical considerations





Uma Rani

International Labour Office
Senior Economist
(amara@ilo.org)



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Thank you



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