

# Data Justice in the Workplace

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## Project:

# Data Justice: Understanding datafication in relation to social justice (DATAJUSTICE) – ERC Starting Grant 2018-2023

## Topics



Border control and migration



Law enforcement and policing



Low-wage work

## **Data and the labour movement**

- Digital campaigning
- 'Connective action'
- Privacy concerns

## **Data and labour**

- Digital labour as 'playbour'
- Platform labour and gig economy
- Under-researched: transformation of labour relations across work (other than automation)

## The worker's datafication

- Communications (email, phone...)
- Sensors (IoT, chips, cards, wearables...)
- Surveillance (video, audio, sensors, computer use...)



## Alarm over talks to implant UK employees with microchips

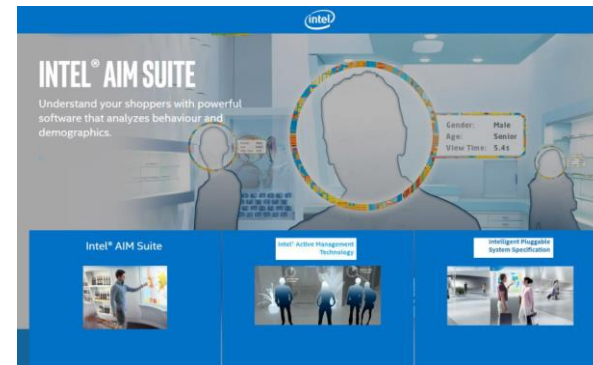
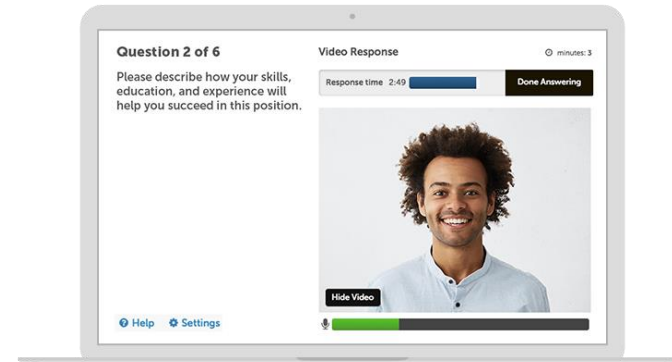
**Trades Union Congress concerned over tech being used to control and micromanage**



▲ Jowan Österlund from Biohax holds a microchip implant the size of a grain of rice between his thumb and forefinger. Photograph: James Brooks/AP

## Data driven tasks

- Data-driven hiring
- Performance monitoring
- Reputation management
- People analytics
- Automation



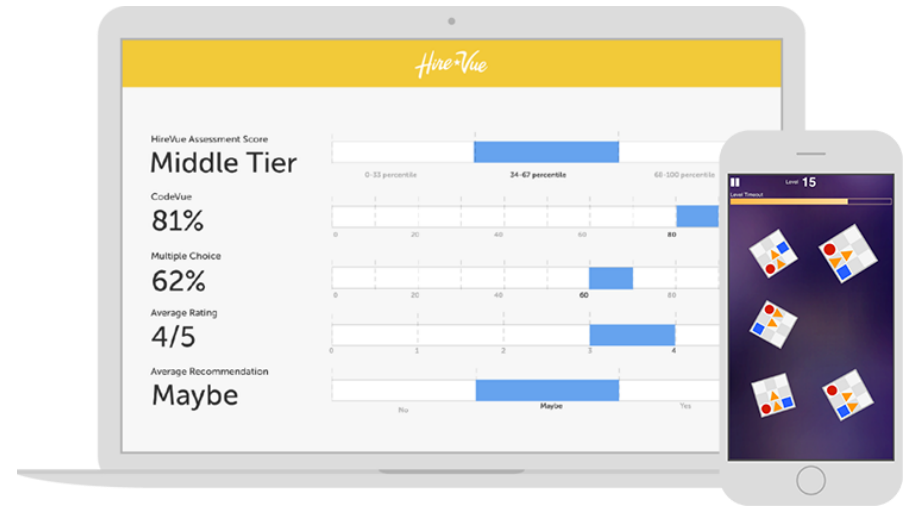
# The Best Employee Monitoring Software of 2018

By [Rob Marvin](#) 11 Oct 2018

*It's important to have visibility into what your onsite and remote employees are doing while on the clock. We test five employee monitoring tools for tracking user productivity, application and website activity, screen capture and alerts, and much more.*

## Hiring

- Candidate ranking and CV screening
- Automated interviews (Hilton is used for AI-based assessments)
  - Sentiment and personality classification
  - Problem-solving tests
  - Chatbot to interact with workers/candidates
- Human resources scheduling and activity forecasting



BUSINESS NEWS    OCTOBER 10, 2018 / 4:12 AM / A MONTH AGO

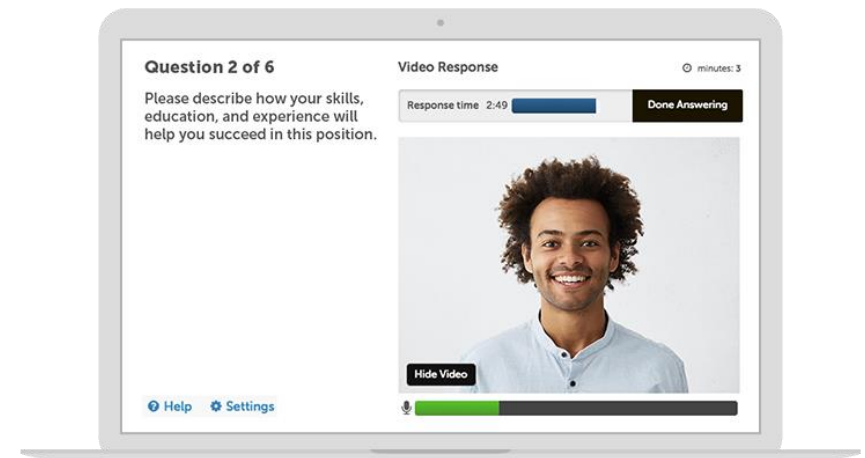
## Amazon scraps secret AI recruiting tool that showed bias against women

Jeffrey Dastin

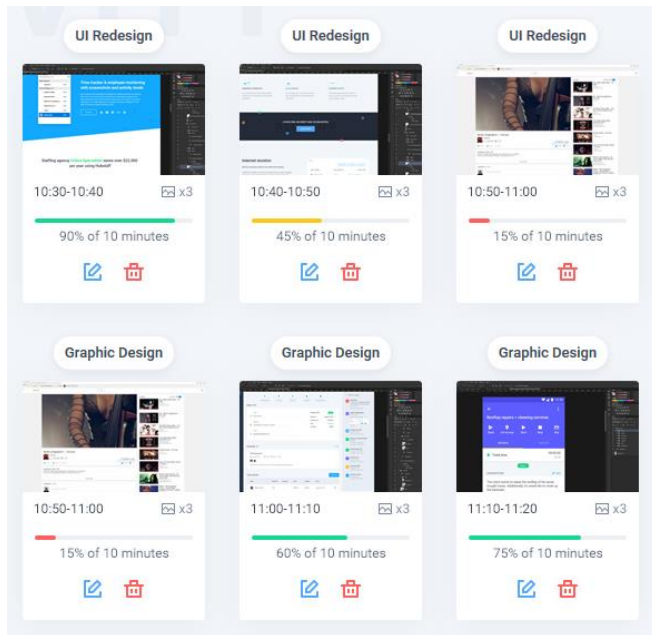
8 MIN READ



SAN FRANCISCO (Reuters) - Amazon.com Inc's (AMZN.O) machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.



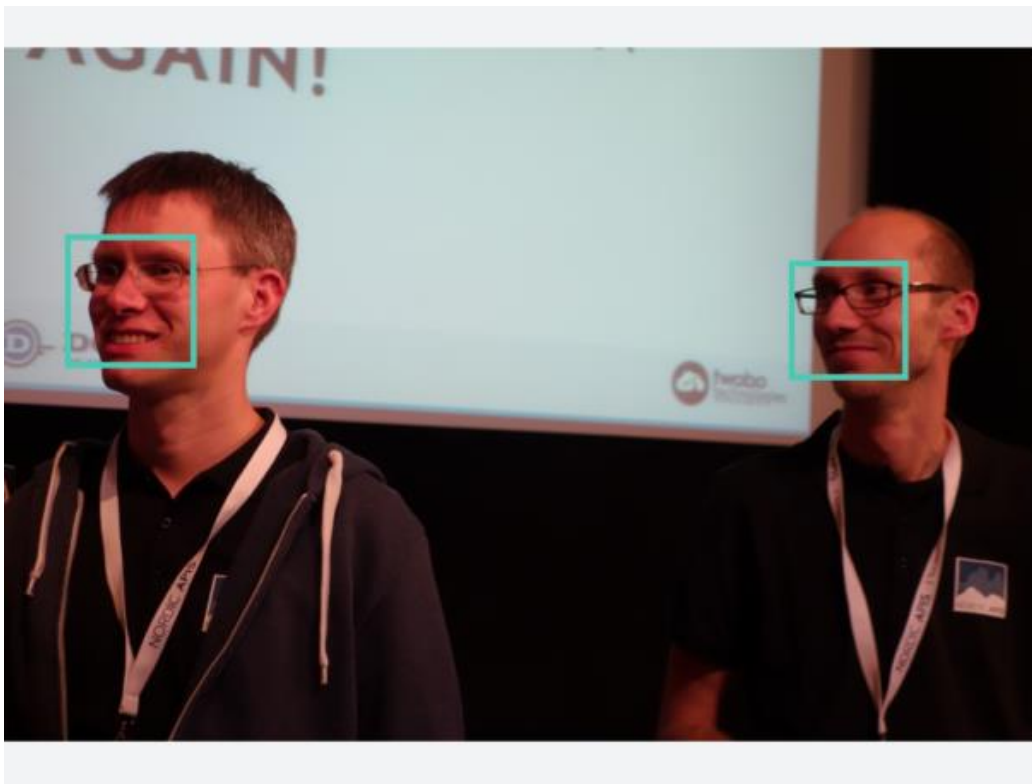
# Computer activity monitoring





## Computer vision for emotion detection

- Computer vision and AI for emotion estimation
- Used to train employees, analyse customer satisfaction or staff behaviour



Detection Result:  
2 faces detected

JSON:

```
[  
  {  
    "faceRectangle": {  
      "left": 120,  
      "top": 362,  
      "width": 255,  
      "height": 255  
    },  
    "scores": {  
      "anger": 6.506412e-7,  
      "contempt": 0.00000107357334,  
      "disgust": 0.0000137053685,  
      "fear": 2.51182275e-9,  
      "happiness": 0.9994379,  
      "neutral": 0.000546224066,  
      "sadness": 1.46409562e-7,  
      "surprise": 2.88747827e-7  
    }  
  }  
]
```



## Voice analysis for sentiment and content analysis

- Cogito: the system can monitor and change workers behaviour in call centres (MetLife, Zurich Financia...)
  - Analyses customer dissatisfaction and suggests actions
  - It warns about fast speech
  - It notifies about missed legal requirements

A graphic with a green border. On the left, there is a section titled "Stay Calm" with a list of instructions. On the right, there is a circular callout with a black center and a red ring, containing the text "Dissatisfaction Might need Supervisor?".

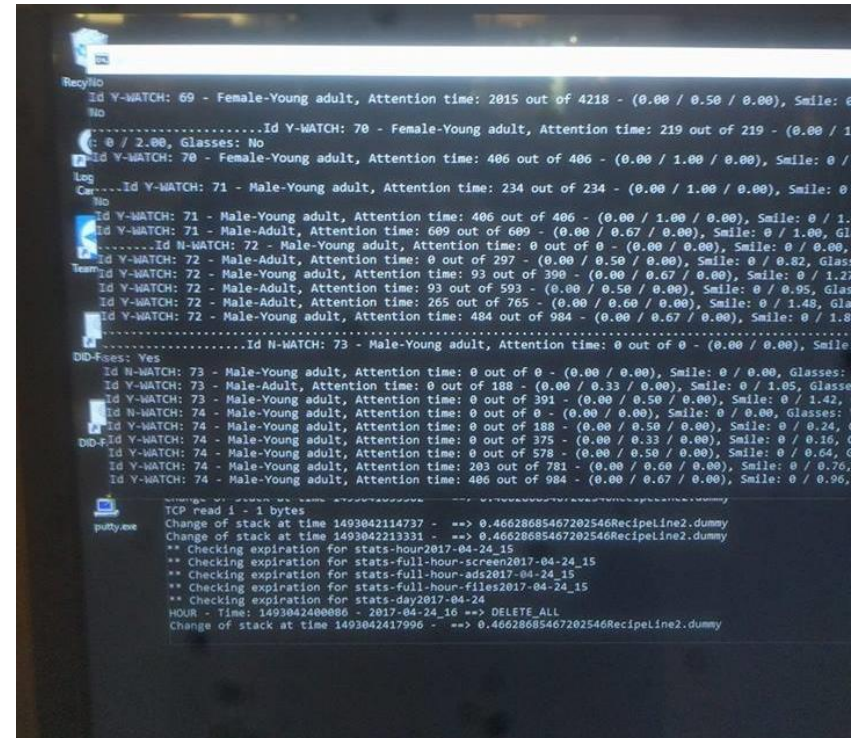
**Stay Calm**

- **Apologize**, > Assure the patient you'll help > Address all concerns
- Be thorough – Note as much information as possible
- **If patient remains escalated, offer supervisor/manager**
- **If requested: GET SUPERVISOR IMMEDIATELY**

Dissatisfaction  
Might need  
Supervisor?

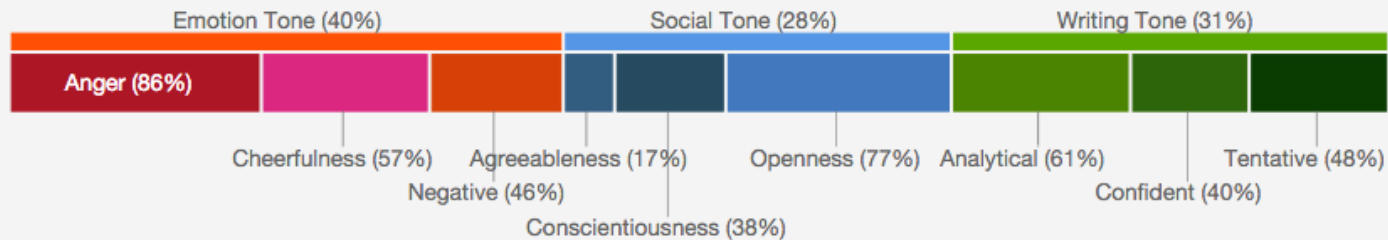
## Attention evaluation

- Eye tracking to evaluate visual inspection tasks
- Facial recognition to estimate attention span and demographics of customers



# Profiling

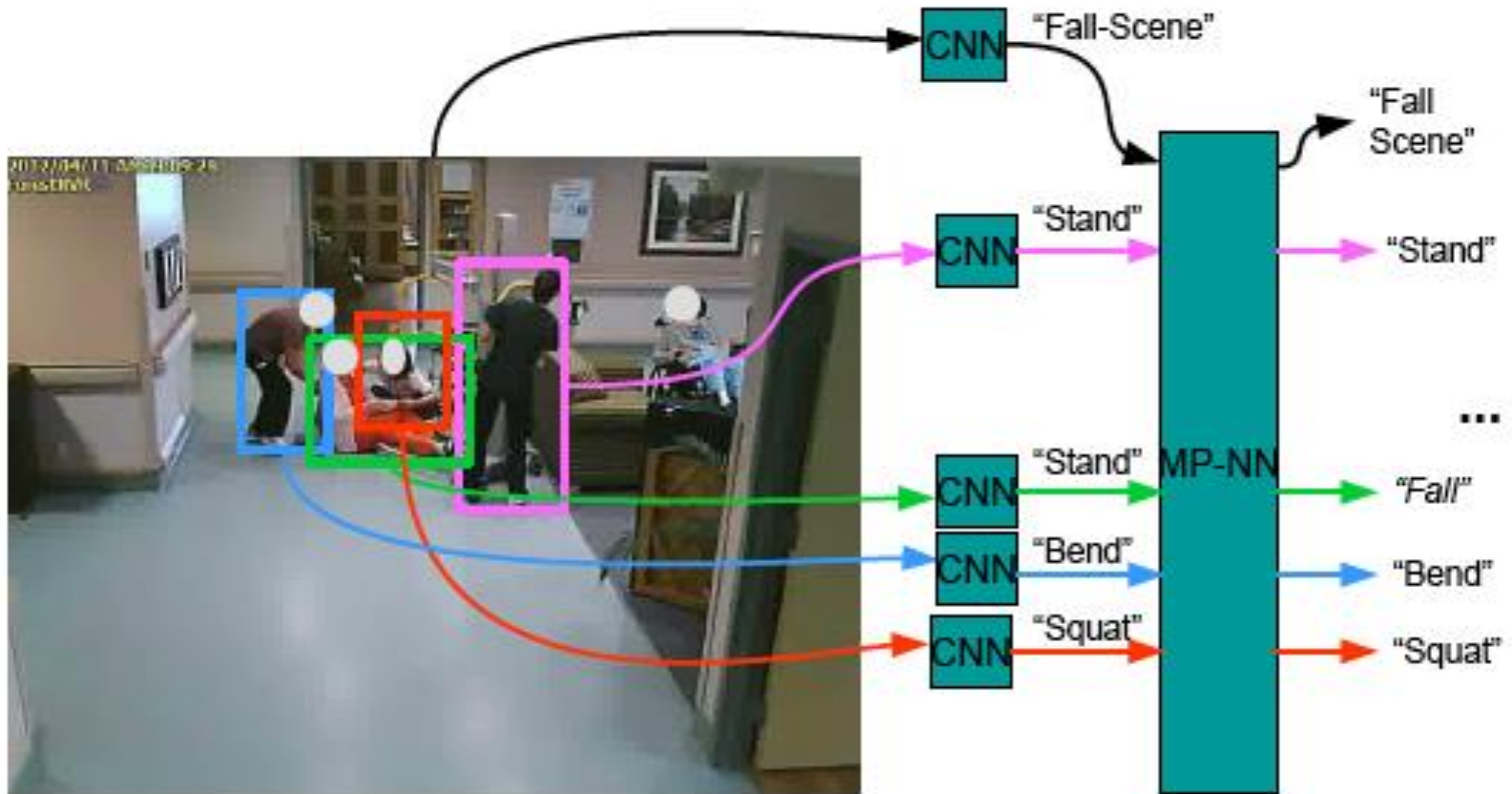
Word Count returns the percentage of words per tone and the total number of words for each individual tone trait.



Click on any highlighted word to see suggested synonyms.

Open data **folks** could have a lot to **learn** from the API community, **and** vice-versa **is** **true** **too**.  
**As** **the** open data field **is** **about** exposing information, **there** **is** much overlap **between** open data  
**188** ">and APIs **or** Application Programming Interfaces, which expose **an** application's data **or** functionalities **for**  
**third** **party** **integration**.

# Scene understanding



### **Research Plans I:**

- Scoping and mapping of typology of technologies across Europe
- Identify case studies
- Interviews with HR, management and frontline workers

### **Research Plans II:**

- Data as a workers' rights concern
- Interviews with unions, workers' associations
- Moving beyond data ethics – alternative data economy