

Artificial Intelligence and Robotics

Recruiters turn to AI algorithms to spot high-fliers

Humans hire people in their own image, but can machines do any better?



Francesca Kelsall completed tests in an experiment to establish whether an algorithm can predict better than a human who would make a top employee © Charlie Bibby/FT

9 HOURS AGO by: Alicia Clegg

Francesca Kelsall found a quiet room on her university campus, checked the light levels and acoustics, and shut the door. She then logged on to an [InterContinental Hotels Group \(IHG\)](#) recruitment site, sat behind a desk and began talking to camera.

She tried not to sound over-rehearsed, knowing every word, expression and gesture would be pored over, not by recruiters, but by a computer. “I just tried to stay as natural as possible, as if I was speaking to interviewers.”

Ms Kelsall, a masters student in luxury hospitality at the University of West London, is one of 20 candidates recruited into IHG’s graduate programme in Europe. She also completed cognitive tests and personality profiles in an experiment to establish whether an algorithm can predict better than a human who, from a candidate pool, would make a top employee.

Template of targets

The prediction technology — which IHG uses as a filter and check on its regular selection methods — was developed by UK start-up [Cognisess](#). Gil Mulders, IHG Europe’s head of learning, approached Cognisess after noticing that candidates who aced their first interview were often marked down when reinterviewed by different managers.

To develop a template of characteristics to target, IHG profiled its top-performing early-career managers and made them sit the same tests as Ms Kelsall and her peers. “What we’re hoping is that the recruits who perform best [as trainee managers] will be those who scored highest on Cognisess’ tests,” Mr Mulders says. The company expects results next year.

IHG is not alone in hoping predictive analytics can inject science into job interviews. According to a [2015 research overview](#) for the Chartered Institute of Personnel and Development, there is plenty of evidence humans hire in their own image — even preferring candidates who share their pastimes.

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Can machines be more objective? The data streams that drive Cognisess' predictions range from classic psychometrics and cognitive tests, to assessments that probe for personality traits by studying how people express themselves in speech and on paper.

The company also uses computer vision, which extracts data from images, to analyse the different elements in videos, including fleeting facial expressions. Cognisess says it can detect basic emotions and spot when a candidate's words are at odds with what they feel.

This analysis is informed by the work of psychologist [Paul Ekman](#). It assumes our faces accurately reveal our feelings through tiny involuntary movements of our facial muscles, lasting fractions of a second, and that the same expressions are found in all cultures — although some academics [dispute this](#).

Computer bias

“It's not a perfect science,” says Cognisess' founder Chris Butt, though, he says, neither are the “snap judgments” made by humans. But in the time taken to read a CV or score a video, a machine can zip through an entire pile. And unlike humans, algorithms never tire: a [2011 study](#) found legal judges become more punitive as the day wears on. That does not mean artificial intelligence is impartial; studies show algorithms can [absorb and amplify prejudices](#).

Removing demographic labels will not necessarily help, says Noelia Jiménez Martínez, a consultant at data science business Pivigo. “An algorithm can pick up on data that's merely associated with being male or female, such as participation in particular sports. That can be enough to perpetuate a hiring bias.”

Given time, it may be possible to train algorithms to check for adverse effects on disadvantaged groups. However, organisations can be biased in ways that are hard to eliminate. If a business has historically over-selected extroverts, an unsophisticated algorithm may recommend extroverts, even when the need is to balance the mix with quieter people.

Jean Martin, head of talent research at Gartner, a tech research and advisory business, says: “When properly applied, we find algorithms can reduce [hiring] bias. The key is to have a wide spread of [training] data, not just data that’s biased from the get-go.”

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While innovators rush to stop our prejudices polluting machine rationality, some argue that, with a dash of machine-style systemising, humans can reclaim the interview as a useful tool.

James Meachin, head of assessment at business psychologists Pearn Kandola, says: “Unstructured interviews resembling conversations are massively prone to bias because people look for and value traits in others that they recognise in themselves.” However, when all candidates are asked the same questions “making comparisons between people, to commonly agreed standards, becomes easier and the interview’s predictive power improves”, he says.

Grounding assessments in role-related dilemmas could be another way to avoid people who sail through interviews but fall short on the job. As part of energy company BP’s screening of graduates,

applicants are presented with work-based scenarios to test their judgment and social intelligence.

However, Suzy Style, BP's head of UK graduate resourcing, foresees a day when the scenarios might change from online exercises into something closer to work tryouts. "In the future, [it's possible] that we could create a [virtual reality](#)-style immersive experience, in which the candidate might be placed on a virtual oil rig, or a trading floor, which could really bring [things] to life."

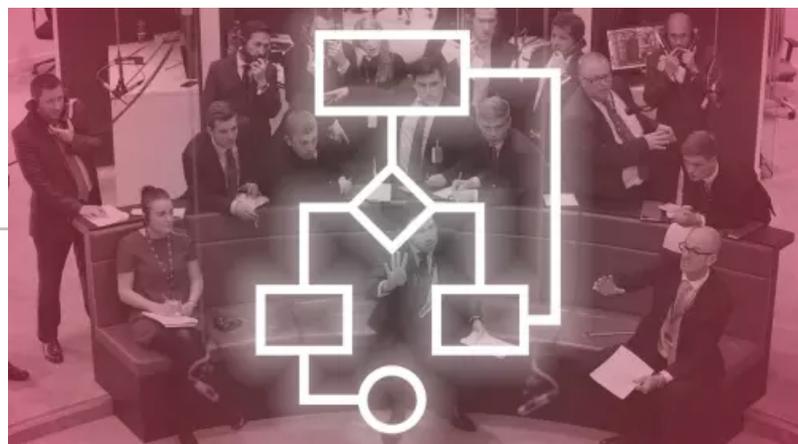
Will hiring managers be out of a job in the age of the machine? If the predictions on candidate performance made by Cognisess prove accurate, Mr Mulders plans to extend the pilot into executive recruitment. But he thinks that there are aspects of people — such as likeability and agreeableness — that bits and bytes cannot capture. "In industries such as hospitality that rely on the personal touch, I think, at some stage in the process, we will always need humans to assess humans."

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