Hirevue, an artificial intelligence is revolutionizing the recruitment process in the United States. It allows companies to assess current employees' performance and how prospective employees can prove their worth. The system uses candidates' computer or cellphone cameras to analyze their facial movements, word choice, and speaking voice before ranking them against other applicants based on an automatically generated "employability" score. The system is claimed to employ superhuman precision and impartiality to zero in on an ideal employee.[1] Applicants receive no feedback on rejections because Hirevue's CTO, Loren Larsen, deems it irrelevant yet illogical to assume unfair eliminations by the technology. A 30-minute standard Hirevue assessment includes six employer-written questions but can yield up to 500,000 data points all of which contribute to a candidate's overall score. The HireVue algorithm analyzes applicants' responses, including facial expressions, eye contact, and enthusiasm, which contribute to 29% of the overall score, while audio features account for the remainder. Reports generated help employers assess candidates against internal benchmarks and past performance indicators like sales goals. Following the assessment, a report card on competencies such as "willingness to learn" and "personal stability" is produced, and candidates are categorized into high, medium, and low tiers, often leading employers to prioritize those favored by the system.

HireVue's video-interview screening tool fits well within the classification algorithm category due to its methodical categorization of candidates based on predetermined criteria. It evaluates various aspects of candidate responses, including facial expressions, word choice, and tone of voice, to assign them a likelihood of success. Like classification algorithms, it aims to organize input data (candidate responses) into distinct categories, streamlining decision-making for employers during the recruitment process. Over time, with a consistent influx of data from applicants, the categories will get broader and some candidates who deserve the role, but who exhibit a flaw that the algorithm aligns with the "rejection" pile could lead to that candidate not getting to the next round.

Its video-screening algorithm seems like supervised machine learning initially, but as the dataset grows and the algorithm learns more, biased opinions are a possibility. Supervised learning involves training the algorithm on labeled data to make predictions or classifications. The algorithm also groups candidates based on predefined benchmarks and criteria such as expressions and audio cues.

The algorithm is trained on candidates' facial expressions, tone of voice, and word choice. It also incorporates benchmarks from past employee performance which enhances the predictive accuracy of the system and provides a comprehensive assessment beyond traditional metrics. A 30-minute interview can generate 500,000+ data points.

The dataset used by HireVue's algorithm offers several advantages, including its ability to capture nuanced cues like facial expressions and tone of voice, providing a more holistic assessment of candidates. To that end, it saves employers thousands in recruitment and

[1] Hirevue's AI face-scanning algorithm increasingly decides whether you deserve the job - The Washington Post. (n.d.). https://www.washingtonpost.com/technology/2019/10/22/ai-hiring-face-scanning-algorithm-increasingly-decides-whether-you-deserve-job/

timeline-wise converts weeks to days. By including demographic data, it facilitates quantitative assessment of algorithmic fairness and effectiveness in mitigating biases.

However, the dataset's reliance on subjective criteria like "enthusiasm" may introduce bias, potentially disadvantaging certain candidates. Moreover, the lack of transparency regarding how the algorithm weighs different factors raises concerns about fairness and accountability in the hiring process. Finally, there is a wide range of cases where people may "appear" to not be good enough. They could be non-native speakers, nervous, or they just don't "look" the part. This could be because of an overreliance on benchmarks.

**Opinion:** How does an insentient algorithm decide who is worthy of a job? HireVue's AI-driven recruitment system, while claiming objectivity, may perpetuate discriminatory practices and undermine candidate agency. Researchers called it a digital snake oil - an unfounded blend of superficial measurements and arbitrary number-crunching that is not rooted in scientific fact. Lacking transparency and ethical scrutiny, its unchecked expansion poses threats to privacy and fair employment practices.

**Ethical considerations:**

There are two sides to this coin. Meredith Whittaker a co-founder of the AI Now Institute Research Center in New York calls it "pseudoscience", and "a license to discriminate". Larsen said that such criticism is uninformed and that "most AI researchers have a limited understanding" of the psychology behind how workers think and behave. HireVue's AI-driven recruitment system presents ethical concerns regarding its decision-making process for job candidates.

When designing an algorithm to screen job applicants, programmers often face trade-offs between fairness and accuracy. Going for accuracy may involve analyzing extensive data points like facial expressions and tone of voice to predict job performance accurately. However, this can lead to fairness concerns, as certain demographic groups may be disadvantaged or unfairly penalized due to inherent biases in the data or algorithm. Conversely, prioritizing fairness by limiting bias may sacrifice accuracy, potentially resulting in less reliable predictions of candidate success. For instance, if the algorithm avoids considering demographic information to prevent discrimination, it may overlook relevant factors that could affect job performance.[2]

"Gender Shades" reveals biases in facial analysis by showcasing notable differences in the accuracy of gender classification between various demographic groups, especially concerning skin tone. The results of the study show that algorithms have intrinsic biases since darker-skinned females are regularly misclassified at higher rates than lighter-skinned males. To reduce biases and guarantee equitable and precise algorithmic results, "Gender Shades" assesses commercial gender classification systems using a variety of datasets. **This emphasizes the need for more inclusive and representative training data**.[3]

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[2] Chiu, R. (2020). Can We Fix AI Hiring Bias?.

[3] Drage, E., & Mackereth, K. (2022). Does AI debias recruitment? Race, gender, and AI's "eradication of difference". *Philosophy & technology*, *35*(4), 89.

A bias in AI algorithms, namely in image upscaling, is demonstrated by the example given in the article. It becomes clear how biased algorithmic results might disproportionately impact people of color and other specific demographic groups. Skewed training data and algorithmic design are two of the many causes of these biases.

An article that underscores ethical concerns in AI-driven hiring. The ethical considerations in AI hiring tools arise from their potential to perpetuate biases, despite intentions to reduce them. Amending Title VII restrictions can enable proactive bias mitigation without hindering employers' ability to improve algorithms. Transparency, auditing, and privacy safeguards are essential for ensuring the responsible handling of protected characteristics while preserving fairness.[4]

AI hiring tools, like Retorio and Censia, claim to mitigate biases but may perpetuate them by overlooking structural inequalities. By emphasizing neutrality, these tools shift focus away from systemic issues, such as benchmarks and biased pre-conceptions. This raises concerns about accountability and the genuine promotion of diversity and inclusion. These tools, while claiming to promote fairness, may inadvertently reinforce existing biases within organizations and broader societal contexts, counteracting genuine diversity and inclusion efforts.[5]

[4] Chiu, R. (2020). Can We Fix AI Hiring Bias?.
[5] Drage, E., & Mackereth, K. (2022). Does AI debias recruitment? Race, gender, and AI's "eradication of difference". *Philosophy & technology*, *35*(4), 89.