



Balancing Compliance with AI Solutions

How Artificial Intelligence Can Drive the Future of Work by Enabling Fair, Efficient, and Auditable Recruiting and HR Processes

HiredScore's Story



2007

Analyst & Banker for
Early HR Tech & Online
Job Boards



2010

Bringing AI to Healthcare
for Hospitals & Health
Insurance



ALTARIS

2012

Founded HiredScore to
transform HR to an
AI-based Function



Founder of Future of Work Non-Profit: Tech
Literacy for America across US Public Schools
(as an Aspen Institute 2018 Henry Crown Fellow)

What We'll Focus On During Today's Presentation

1. How do you classify and segment different types of AI?
2. How to think about the regulations AI for Hiring - in the US? Globally?
3. How to consider vendor compliance?

The World is Paying Attention to Ethical AI

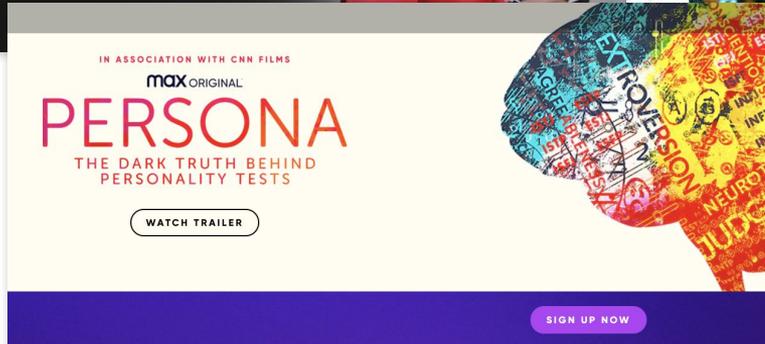
Beyond the Rapidly Evolving Regulatory Focus, Growing Employee and Consumer Focus on AI for HR



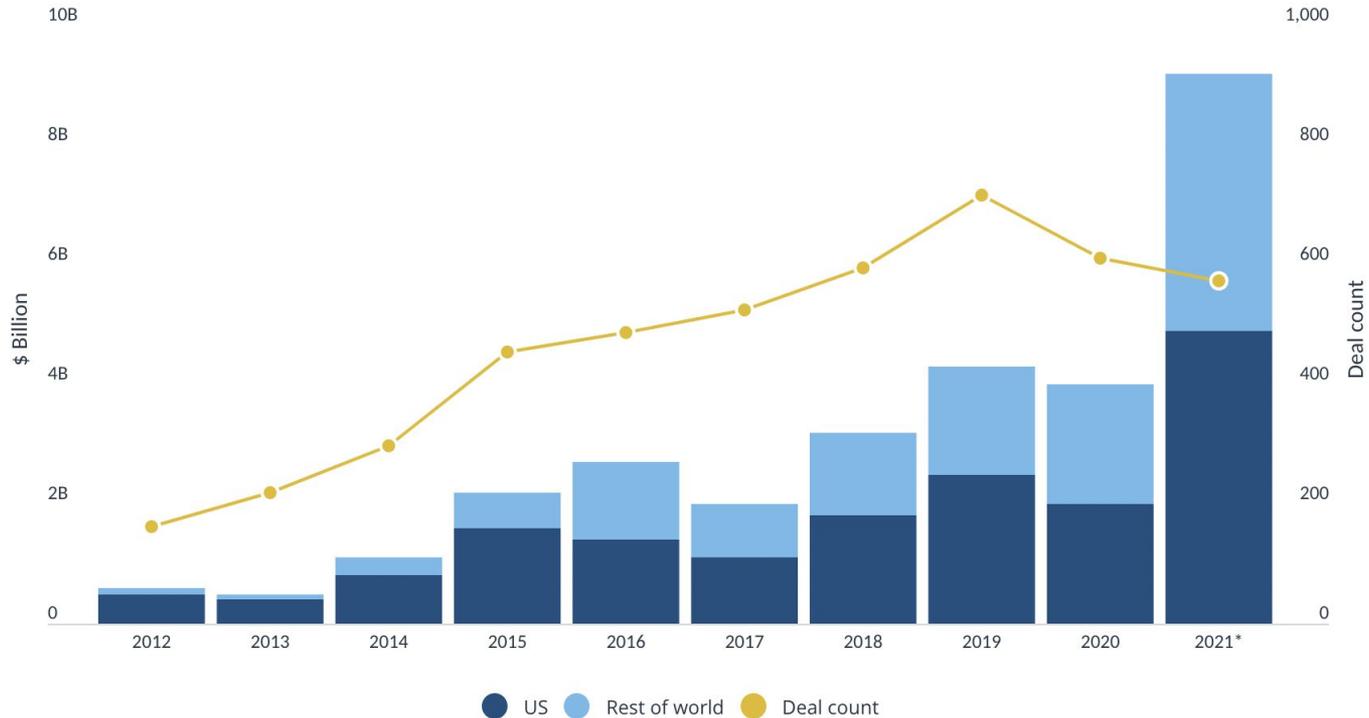
EU plan for risk-based AI rules to set fines as high as 4% of global turnover, per leaked draft

Natasha Lomas @nlpstar / 6:10 AM PDT • April 14, 2021

Comment



With The Unprecedented Rate of HR Tech Investment, the Prevalence of AI Solutions Will Only Accelerate - \$9.2 Billion Raised as of Oct 2021



Pitchbook, Oct 21, 2021.

What Are The Most Common Current Applications of AI for Hiring?

- The dramatic recent increase in the use and acceptance of AI in HR, particularly in talent acquisition, includes some of the most common AI-tools for:
 - Game-based assessments
 - Bots for scraping social media postings
 - Linguistic analysis of candidates' writing samples
 - Video-based interview evaluation
 - Resume screening
 - Scheduling automation
 - Chatbot for candidate care + apply navigation
 - Passive talent outreach + conversion
 - Employee churn prediction

Leading HR Leaders To Ask: How Do I Know If My Planned Innovation Solutions Meet Compliance, Ethical, & Personal Privacy Standards?

Home > Featured

Employers Must Carefully Navigate Using AI in HR Functions

The Risks and Benefits of Decision-Making Informed by Artificial Intelligence

by **ELLIOT DINKIN** — October 24, 2019 in Featured, HR Compliance

An illustration on a teal background showing a white robotic hand with two fingers holding a small human figure in a suit. The hand has circular symbols on its joints.

HR

Articles Interviews News

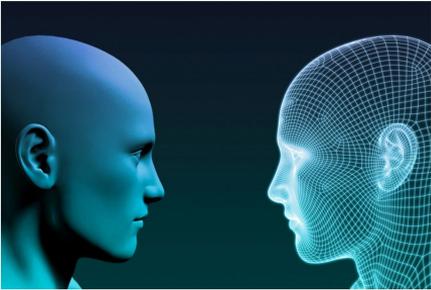


The Ethics of AI in HR: What Does It Take to Build an AI Ethics Framework?

Staff Writer

Apr 16, 2019 | 09:01 PM | 5 Mins Read | Level - Basic | [Read Mode](#)

Puja Lalwani Editor, HR Technologist [Full Bio](#) ▾

An illustration showing two profiles of heads facing each other. The head on the left is a solid, realistic human head. The head on the right is a wireframe or mesh representation of a human head, symbolizing artificial intelligence.

Given No New U.S. Federal Law to Evaluate AI for Hiring Solutions, For Now AI Tools Will Be Evaluated The Same As Existing, Human Processes

- **Validation** - *similar to any other selection procedure today, particularly a company-specific adverse impact test and proof of following job-related criteria*
- **Explainability** - *auditable, logged evidence of how the AI solution arrived at the recommendation or non-recommendation, not just 'explainable inputs and outputs'*
- **Documented Machine Learning** - *proof that the learning is not 'teaching' the AI bias and is even for all*
- **Personal Data Privacy** - *ensuring the proper consent is captured for the use and type of AI and the data*
- **Client Specific Analysis** - *testing must be conducted in a company-specific manner vs proof from 'general data', given applying the AI to different companies or data sets may have very different outcomes or biases*

Since 2016, the EEOC Has Been Publically Exploring This Topic

- As early as Oct 2016, my company (HiredScore) submitted a public commentary to the Equal Employment Commission’s plenary “Big Data in the Workplace: Examining Implications for Equal Employment Opportunity Law” on the use of Big Data in hiring

HiredScore Comment on “Big Data in the Workplace: Examining Implications for Equal Employment Opportunity Law”

Date: October 28, 2016
Submitted by: Athena Karp, CEO of HiredScore, on behalf of HiredScore, Inc

Introduction:

As the Equal Employment Commission explores a new set of guidelines concerning the use of big data and artificial intelligence recommendation systems in making hiring decisions, it is in the interest of HiredScore to submit a comment on the proposed regulations.

HiredScore (hiredscore.com) is a technology company with a set of proprietary software solutions to help large enterprise Talent Acquisition departments more efficiently and effectively identify the most relevant candidates for their salaried job openings. HiredScore’s solutions leverage custom-built algorithms for each of our clients that have been trained using machine learning techniques from large data pools (big data). To generate recommendations, HiredScore’s technology analyzes candidate resumes provided by the applicants and job descriptions created by the company to formulate a prioritization grade (A, B, C, or D) for the most relevant resumes to be screened and reviewed accordingly by recruiters in the initial candidate screening and sourcing process.

Several of HiredScore’s clients are federal contractors, and from an early stage our recommendation software was developed in order to be abide by the existing EEO and OFCCP fair hiring regulations – specifically the “Internet Applicant Recordkeeping Rule” (2006) and “Uniform Guidelines on Employee Selection Procedures” (1978) – which we believe appropriately applies to regulate our solutions.

Group X Recommendation Rate %

$$= \left(\frac{\text{Number of Recommended Individuals from Group X}}{\text{Total Number of Individuals from Group X in Database}} \right) \times (100)$$

Calculation 1. Recommendation Rate Calculation

As seen in Calculation 1, above, HiredScore calculates the recommendation rate of each protected minority group by dividing the number of a specific protected minority group’s individuals who are recommended by the total number of that protected minority group’s individuals in the database that is being queried by an algorithm. HiredScore can verify these test results before an algorithm goes live by conducting a blind study testing the algorithms for any bias against historical requisitions and candidates and on an on-going basis to ensure machine learning has not introduced significant differences to these results.

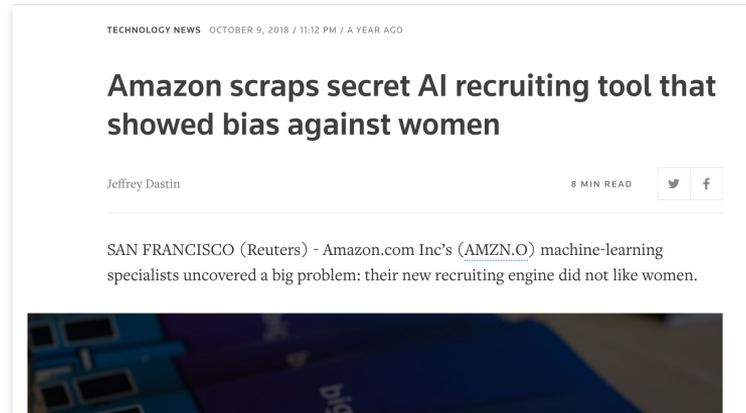
Additionally, depending on the client’s preferences and reporting methods, HiredScore also provides testing results verifying that the customized HiredScore recommendation algorithm for that client does not show statistically significant differences against one or more protected groups, demonstrated through standard deviation testing.

Building Recommendation Software to Meet Fair Hiring Benchmarks:

Machine Learning techniques, which generate predictive analytics tools based on existing data sets, are widely used by existing artificial intelligence software companies today. These techniques mean that if the data sets used for training exhibit a preference for any particular protected group, the algorithms trained on them will contain similar qualities. For example, if an algorithm is trained on a data set that shows a preference for female applicants in a certain job group, the algorithm trained on this data set will also likely recommend female candidates at a comparably higher rate for that role. This trait of predictive analytics software was discussed during the October 13th EEO panel by Dr. Kelly Trindel.

A Brief History of AI for Hiring Biases in the Press & Legal Ramifications

- Amazon built their own resume screening solution since 2014 - 2017 to “search for top talent”
- “Everyone wanted this holy grail... they literally wanted it to be an engine where I’m going to give you 100 resumes, it will spit out the top five, and we’ll hire those.”
- *Amazon’s system taught itself that male candidates were preferable. It penalized resumes that included the word “women’s,” as in “women’s chess club captain.” And it downgraded graduates of all-women’s colleges*



Other Learnings from the Pitfalls from Past AI for Hiring Solutions

As described in news articles, this and other programs suffered from a lack of **preventative bias testing, mitigation, and appropriate business objections of the solutions**, such as:

1. Testing and removing biased hiring process training data
2. Balanced positive and negative examples of selections for each group
3. Prevent non-job related features that can perpetuate bias
4. Remove commonly known bias-generating features
5. Eliminate gender-related & gender-biased words that are not job related
6. Define an appropriate business objectives aligned with appropriate AI responsibilities

HireVue + the FTC - November 2019

1. Electronic Privacy Information Center (EPIC) filed a case in Nov 2019
2. Alleges that HireVue committed unfair and deceptive practices in violation of the FTC Act & charged that HireVue falsely denies it uses facial recognition.
3. EPIC also said the company failed to comply with baseline standards for AI decision-making, such as the [OECD AI Principles](#) and the [Universal Guidelines for AI](#)
4. EPIC has brought similar consumer privacy complaints to the FTC, including:
 - a. A complaint on [Facebook's facial recognition practices](#)
 - b. Investigating the [Universal Tennis Rating system](#), a secret technique for scoring high school athletes.
5. Key concern is the **evaluation of a candidate based on their appearance by means of an opaque, proprietary algorithm**

U.S. Regulatory / Compliance Environment Recent Highlights

Municipal & State-Level Regulation:

- **City Council of New York AI for Hiring Bias Audits (Passed Nov 2021)**
- **Illinois' Artificial Intelligence Video Interview Act (only state with a law covering AI for Hiring)**

The state of Illinois bill on Video Hiring AI legislation passed in 2019, which beyond clear Video Interview AI laws, includes provisions that most AI for Hiring solutions should comply with, such as **auto data purging**, **AI system explainability**, **right to be deleted**, **logging and audit capabilities**, and **banning certain data type usage** (i.e. zip codes)

Federal Regulation & US Fair Hiring Laws

- **Equal Employment Opportunity Commission & Office of Federal Contract Compliance Programs (Oct 2021)**

Announced “Initiative on Artificial Intelligence and Algorithmic Fairness” to collect best practice advice on how employers can benefit from new technologies while complying with employment laws

- **Algorithm Accountability Act of 2019**

Proposed, but did not pass. Cites AI for HR and would require (1) fairness of decisions, (2) detailed description of the automated decision system, its design, its training, data, and its purpose, & (3) data privacy and data security



EU Regulations on Artificial Intelligence & Hiring

General Data Protection Regulation (GDPR)

European Union

Regulation aimed at standardizing how companies protect EU citizens' personal data requiring consent, anonymization of collected data, breach notifications, and safeguards for transferring data across borders

European Approach to Artificial Intelligence

European Union Commission, March 2021

Draft regulation aimed at safeguarding fundamental EU rights, user safety, personal data use, protection, creation without consent or knowledge, risk management and monitoring, and governance of varying High Risk AI technologies



Frameworks for Evaluating AI for Hiring - in the US + Globally

- World Economic Forum's AI for HR Task Force, **Released TODAY** (Dec 7, 2021)
 - Taskforce Goal: Industry, legal, company experts work together to **create a toolkit for HR professionals to promote a human-centered and ethical use of AI**, resulting in positive outcomes for the organization, workers, and society
- Data & Trust Alliance, **To Be Released in Dec 2021/Early 2022**
 - Goal: a not-for-profit consortium of 22 leading companies and institutions shaping the future of responsible data practices to create value and earn trust, producing a vendor algorithmic bias evaluation guide for RFP/RFI's



DATA & TRUST ALLIANCE

Things You Should Be **Weary** of From Any AI for Hiring Vendor

“Our AI system is proprietary/complex/opaque, so it’s impossible to know what led to the decision the AI arrived at for each person it processed in a human-explainable format”

“There are no ways to ensure the system is not unknowingly being “taught” discrimination and bias”

“Bias audits are the clients responsibility and not the AI vendor’s responsibility to support, enable, and run”

“There are no laws governing our space or industry at the moment that we would need to comply with”

“We control the machine learning of the AI (before and/or after) but we can’t provide any proof of it”