



iCIMS Bias Audit

**Summary of Results from 2023 Audit in
response to New York City Local Law
144/2021**



Date: March 5, 2024

iCIMS engaged BABL AI, Inc. (“BABL”) to perform an independent bias audit of the iCIMS “Candidate Ranking” algorithm in accordance with the requirements outlined in NYC Local Law No. 144 of 2021. The bias audit was concluded on February 14, 2024. The Candidate Ranking feature was first distributed in Winter 2021. A summary of the bias audit results is set forth below.

NOTE: The below summary has been prepared by iCIMS, Inc. in collaboration with BABL.AI. This summary is intended for use for (a) iCIMS’ compliance with Local Law 144/2021; and (b) to assist iCIMS’ customers with their compliance efforts. However, this summary report should not be relied on exclusively or dispositively by any employer to satisfy their own legal obligations. iCIMS’ customers are advised to confer with their own legal counsel as to how they can be fully compliant with the law. A complete audit report can be obtained by iCIMS’ customers if requested in writing to responsibleai@icims.com.

System Description

BABL was engaged to audit iCIMS’ “Candidate Ranking” algorithm. Candidate Ranking is an automated feature in the iCIMS Talent Cloud Applicant Tracking System (ATS) which assists recruiters with hiring decisions. This feature helps recruiters expedite candidate screening as the initial step of the hiring process, by providing a ranked list of applicants against a position’s requirements. The algorithm determines a similarity score for candidate’s resume text compared with the job description text by using only skills and titles. No other attributes are used.

The Candidate Ranking feature provides a ranked list of all job applicants to the user – typically a recruiter – via an interface, and all subsequent decisions are made by the recruiter. The rates for candidates that belong to various self-declared demographic groups being in the top 10 ranking as output of the algorithm are displayed below.



Conclusions

BABL's opinions for the bias audit of Candidate Ranking algorithm by iCIMS are as follows:

Audit Section	Opinion
Disparate impact quantification	PASS
Governance	PASS
Risk assessment	PASS
Overall	PASS

Type(s) of Data Collected

Source and Explanation of the Data Used to Conduct the Bias Audit

The source of the data used by iCIMS to test for bias and disparate impact was collected over the period of time from November 2022 through November 16, 2023. This was anonymized production data on jobs, candidates, and candidate rankings against the jobs. iCIMS provided BABL with copies of its bias testing data and disparate impact results. Details about the testing of such data are set forth below:

Testing conducted by: iCIMS

Date of last testing: January 2024

Time span of data: November 17, 2022 to November 18, 2023

PCVs for which disparate impact was quantified:

1. Gender
2. Race/ethnicity

Positive outcome: being in the top 10 candidate ranking as displayed in the user interface of recruiters

User-configurable settings that can affect positive outcome:

1. Administrator-controlled settings for job descriptions in the ATS
2. Filters and sorts applied by users, such as by:
 - a. Application source, status, or date
 - b. Distance to job



c. Textual elements – e.g., keyword, candidate name

Settings on which disparate impact was tested: a wide set of permutations and combinations of administrator settings for a variety of jobs in a variety of industries, and without applying any filtering or sorting options.

Metric corresponding to the selection rate: the number of candidates of a demographic group being in the top 10 ranking over the total number of candidates of that group.

Selection Rates and Impact Ratios

Non-intersectional, Gender, sorted by Impact ratio

	N applicants	Selection rate	Impact ratio
Female	25,770	0.636	1.000
Male	29,333	0.619	0.986

Non-intersectional, Race/ethnicity, sorted by Impact ratio

	N applicants	Selection rate	Impact ratio
White	21,532	0.654	1.000
Black or African American	11,341	0.629	.963
Native Hawaiian or Pacific Islander	183	0.661	N/A*
Two or more races	2,288	.0618	0.945
Hispanic or Latino	8,115	0.605	0.926
Asian	6,456	0.606	0.927
Native American or Alaskan Native	447	0.564	N/A*

**N/A refers to the demographic group representing less than 2% of the total N applications in the table. Numbers in red indicate values below the four-fifths rule.*



Intersectionals, sorted by Impact ratio

Gender	Ethnicity	# of Applications	# of Selected	Selection Rate	Selection Rate LL	Selection Rate UL
Female	Asian	2679	1598	0.596	0.578	0.615
Female	Black	5925	3813	0.644	0.631	0.656
Female**	Hawaiian/Pacific Islander**	68**	46	0.676	0.565	0.788
Female	Hispanic	3601	2266	0.629	0.613	0.645
Female**	Multi**	1164**	734	0.631	0.603	0.658
Female**	Native American**	190**	111	0.584	0.514	0.654
Female	White	10000	6591	0.659	0.650	0.668
Male	Asian	3715	2272	0.612	0.596	0.627
Male	Black	5296	3271	0.618	0.605	0.631
Male**	Hawaiian/Pacific Islander**	112**	73	0.652	0.564	0.740
Male	Hispanic	4470	2623	0.587	0.572	0.601
Male**	Multi**	1094**	661	0.604	0.575	0.633
Male**	Native American**	252**	137	0.544	0.482	0.605
Male	White	11339	7366	0.650	0.641	0.658

N/A refers to the demographic group representing less than 2% of the total N applications in the table. Numbers in red indicate values below the four-fifths rule.