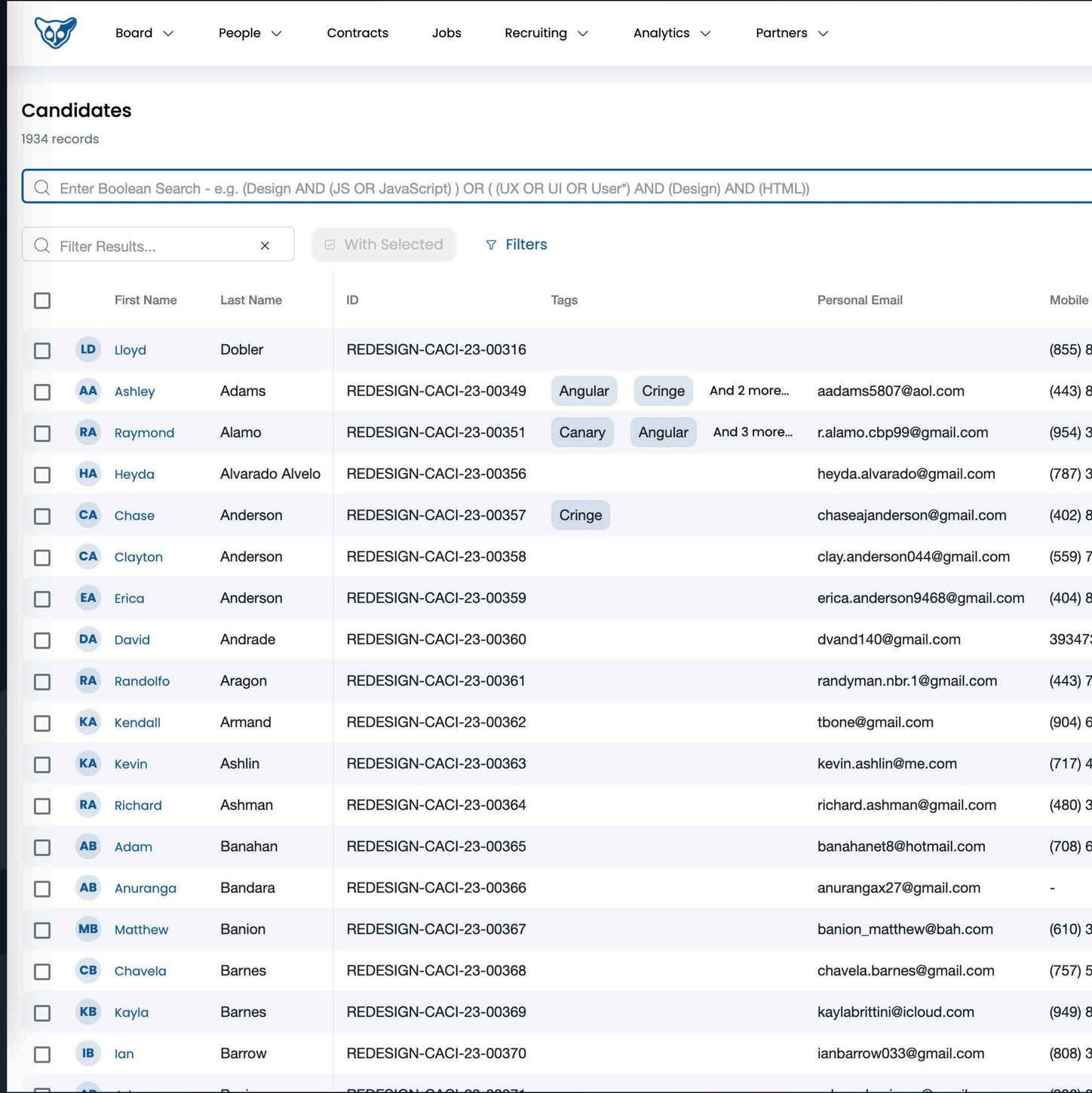
Full-Text Search Usage

Feature Update

B. Mustafa 27 April 2023

Full-Text Search

- Searches combined resume text for a given candidate or employee
- Range in syntax from “simple Google-style search” to full Boolean
- Perform quickly, accurately



Search Syntax

- Field Names
- Wildcards
- Regular Expressions
- Fuzziness
- Proximity Searching
- Date and Numerical Ranges
- Relevance Boosting
- Boolean Operators
- Grouping

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Field Names

- By default, the text of the combined resumes is searched for the terms you specify
- You may specify a variety of field names to search, and you may mix and match in a query

Example

(LAN OR WAN) AND ('Network Engineer' OR 'Network Architect') AND is_veteran:true

Yields anyone with LAN or WAN and Network Engineer or Network Architect in their resume text and has the is_veteran flag set to true

Identities Fields

If you don't specify a field name for a given term, the combined text of the Identity's resumes will be searched

- comments
- name_first
- name_middle
- name_last
- internal
- description
- mobile_phone
- work_phone
- work_email
- personal_email
- street
- city
- state
- zip
- salary
- start_date
- date_of_birth
- place_of_birth
- emergency_contact
- emergency_contact_phone
- status
- termination_description
- created_at
- updated_at
- is_veteran
- designation
- employee_status
- flsa
- shirt_size

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Wildcards

- Wildcard searches can be run on individual terms, using ? to replace a single character, and * to replace zero or more characters

Example

(?AN) AND ('Network Engineer*' OR 'Network Architect')

Yields anyone with a three letter word that ends in “AN” and starts with (or is) Network Engineer or Network Architect in their resume text

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Regular Expressions (regex)

- Regular Expressions are an advanced syntax for data analysts, programmers, and scientists to express patterns
- If you're familiar with it, you may use it by wrapping your regex in slashes
- You may specify a field using the Field Naming convention for a regex, by default, the resume combined text is searched

Example

(/[L|W]AN/) AND ('Network Engineer*' OR 'Network Architect')

Yields anyone with LAN or WAN and starts with (or is) Network Engineer or Network Architect in their resume text

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Fuzziness

- We can search for terms that are similar to, but not exactly like our search terms, using the “fuzzy” operator
- The goal is to catch misspellings: This uses a “Damerau-Levenshein distance”, which basically means it counts the number of changes between a word and its match, whether that is an insertion, deletion, or substitution of a character
- By default, it’s 2 changes, and it generally is found that catches 80%+ of misspellings, you can specify the number after the Fuzzy operator (~) to change this
- Combining FUZZINESS and WILDCARDS is NOT supported in the same term (but you can use them in the same search on different terms)

Examples

(LAN OR WAN) AND ('Network Engineer’ OR 'Network Architect’) AND (Raytheon~)

Yields anyone with LAN or WAN and Network Engineer or Network Architect and Raytheon (or any variant with 2 changes) in their resume text

(LAN OR WAN) AND ('Network Engineer’ OR 'Network Architect’) AND (Raytheon~3)

Yields anyone with LAN or WAN and Network Engineer or Network Architect and Rathiun (or any variant with 3 changes) in their resume text

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Proximity Searches

- A proximity query allows specified words to be further apart or in different order

Examples

(LAN OR WAN) AND ('Network Engineer'~3 OR 'Network Architect')

Yields anyone with LAN or WAN and has the word "Network" within 3 words of 'Engineer' or Network Architect

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Date and Numerical Ranges

- Ranges can be specified for date, numeric or string fields. Inclusive ranges are specified with square brackets [min TO max] and exclusive ranges with curly brackets {min TO max}

Examples

(SQL OR ORACLE) AND created_at:[2020-08-01 TO *]

Yields anyone with SQL OR ORACLE that was created after August 1st, 2020

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Relevance Boosting

- By default, the relevance ranking returned for resumes is computed with all terms contributing equally
- To weight certain terms more heavily, use the boosting operator (^)

Examples

(SQL OR ORACLE) AND ((is_veteran:true)^2 OR (is_veteran:false))

Yields anyone with SQL OR ORACLE but weights veterans twice as heavily

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Boolean Operators & Grouping

- You may use the normal parenthesis and AND/OR or AND NOT syntax
- You may group fields

Examples

(SQL OR ORACLE) AND shirt_size:(L OR XL)

Yields anyone with SQL OR ORACLE who has a L or XL shirt size