

Leveling the Digital Playing Field for the Job Seeker

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Cybersecurity Research Acceleration Workshop and Showcase

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Quad Chart for: Leveling the Digital Playing Field for the Job Seeker

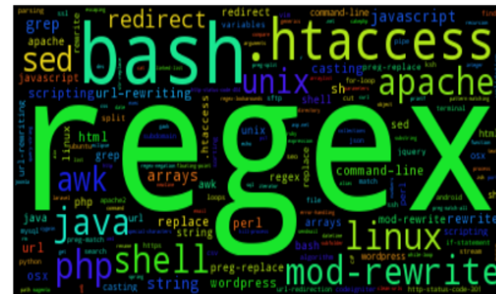
Challenge:

Develop an un-biased framework for vetting job applicant profiles that consists of both online and resume data

- Represent, identify, and measure skills that haven't been explicitly mentioned in the job description or resume
- Mapping text from online social media and blogs to actual skill terms

Solution:

- Develop an automated process for generating domain-specific skills taxonomy
 - **Automatic bootstrapping is one component of this process**



Value proposition:

- Enable semantic comparisons between online profiles, offline profiles and job descriptions
- Develop means for identifying discrepancies in order to provide better feedback to individuals (applicant and potential employer)
- Move beyond the limitations of resume experiments

What we need to TTP

- Data
- Opportunities to pilot the research

Contact us

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Privacy, Online Data, and the JobSeeker

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SCHOOL OF

INFORMATICS AND COMPUTING

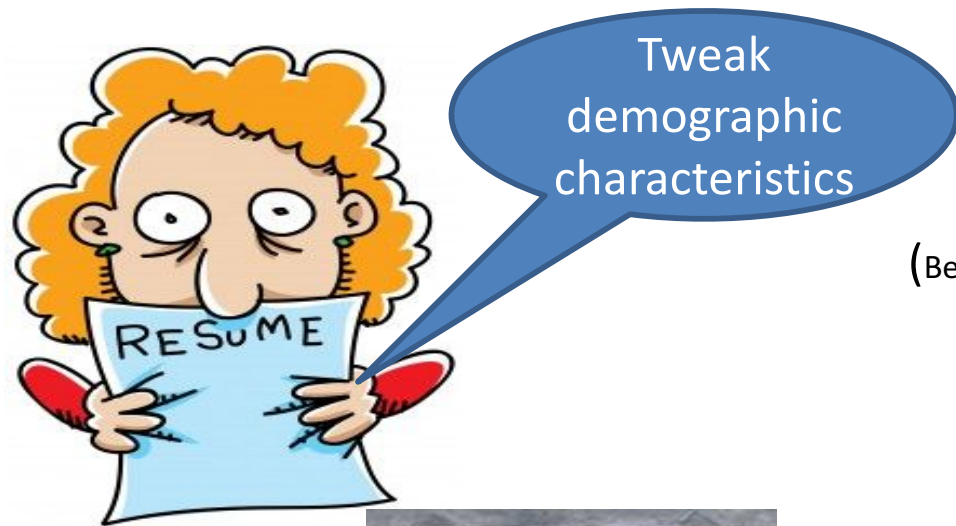


Introduction

- While evaluating job applications, recruiters try to determine whether:
 - the information that is provided by a job seeker is accurate
 - it describes a person with sufficient skills
- Prior Research has shown this process to be fraught with bias.



Resume Experiments and Bias



(Bertrand 2004)

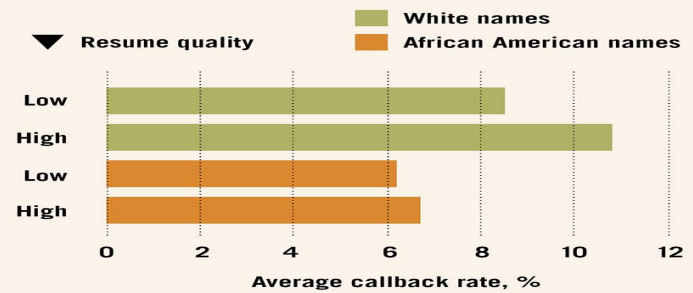


(Acquisti 2015)

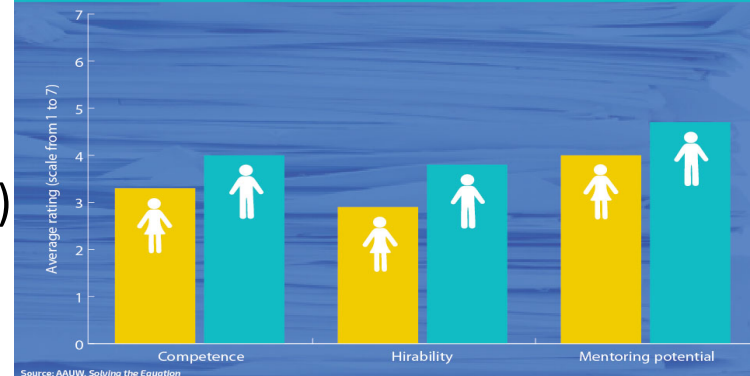
(Moss-Racusin 2012)

Racism in a resume

Job applicants with African American-sounding names got fewer callbacks.



How employers rate female and male candidates with identical résumés



Think you're hiring the right person? You might not be. Studies show that stereotypes and biases often lead employers to select male candidates, regardless of qualifications. #addwomen



Concerns

- Jobseekers
 - Try to hide their age
 - Obfuscate career transitions
 - Conceal qualifications
 - Limited training
 - Over qualified
 - Lack tools to express and present their skills
- Employers
 - Seek to identify discrepancies in applications
 - Lack automated tools to evaluate applications

Naïve Solution



- Anonymize Resume
 - Remove all identifying information
- Is this a simple or hard task?
- What makes information identifying?



Online Data and Hiring

entelo

TalentBin

facebook 1.1 Bn

g+ 600m

twitter 500m

Blogger WordPress tumblr. YouTube Pinterest foursquare

slideshare SU Meetup about.me digg Quora

flickr bitbucket

Build

gild Search all of Gild

Dashboard Skills Certifications Challenges Jobs

Patrick DeSantis

No description

skills 26 endorsements 00 certifications 07

DEGREES: MS BS

Adjunct Professor - Computer Science

Tampa, Florida United States

6 LEVEL 9,533 WEEKLY RANK +23 POINTS THIS WEEK

How do you compare?

Jelle	Patrick
1 professional skills	26
0 certifications	7
0 challenges	23

Endorse This Person

Follow This Person

Invite a Friend

followers: 24

following: 10

AppAppeal

Skills are rated using a combination of information and tests. A certification indicates a validated proficiency with that skill.

English - Written	Computer Science Knowledge	HTML / XHTML
0 EXCEPTIONAL 800	0 EXCEPTIONAL 800	0 EXCEPTIONAL 800
666	609	609
08	07	06

Next Steps

- Move Beyond Resume Experiments
- Build a Framework that:
 - Uses online and resume information to create jobseeker profiles
 - Develop means for identifying discrepancies in information in order to provide better feedback to individuals
 - Enable semantic comparisons between profiles

Thanks



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