



Ghost Jobs, Real Costs

Labor Market Distortions from Ghost Jobs Postings



Steven Singer and Derya Oktay



The Job Hunt Today: Lots of Posts, Few Real Jobs

Forbes

LEADERSHIP > CAREERS

Starting Your Job Search? Watch Out For Ghost Jobs, Lack Of Feedback And Intense Competition

By [Jack Kelly](#), Senior Contributor. © Jack Kelly covers career growth, job mark... [Follow Author](#)

Published Jan 10, 2025, 09:20am EST, Updated Feb 12, 2025, 02:07pm EST

JOB SEARCH

“Ghost Jobs” Might Be The Reason Your Job Applications Are Going Nowhere

BBC

Job boards are still rife with 'ghost jobs'. What's the point?

19 March 2024

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Beware the Phantom Job Listing

Jobs Go Unadvertised as Managers Rely on Their Own Contacts

Meet the Authors



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Disclaimer: This is independent research not necessarily reflective of the viewpoint of Outten & Golden LLP

Introduction



Since the beginning of 2025, LinkedIn added an average of **187,000** new jobs each month with numbers increasing



On average, Job seekers submit **~27 applications** to land a single job interview and **~162 applications** to secure a job



Job seekers spend around **23 minutes** filling out a singular job application and **~6.5 hours per week** browsing job advertisements



Studies suggest that approximately **20%** of total job postings are fraudulent or non-actionable. These are referred to as **ghost postings** and their prevalence is only increasing.

Research Problem and Goals



Job Seekers

Wasted hours
Lost money
Drained morale



Employers

Clogged pipeline
Wasted HR time
Weaker hires



Research Gap

Unknown economic
impact



Our Goals

Measure the harm
Find who's hit
hardest

*Our work is new because we turn “ghost postings” from anecdotes into data: we spot likely ghosts, measure how common they are at scale, use a simple, practical model to project real-world consequences for job seekers and employers, and apply an equity lens to see **who bears the burden** by mapping the distributional impact across different groups*

Agenda



Introduction



Research Problem and Goals



Data and Analysis



Findings



Conclusion and Next Steps

LinkedIn Data: What We Analyzed

- **Source:** LinkedIn Job Postings
- **Time Window:** Mar 3–7, 2025 (single week)
- **Scope:** ~20,000 postings across arts, food service, construction, legal, finance, engineering
- **Geography:** States with pay-transparency laws (CO, DC, HI, IL, MD, MA, MN, NJ, NY, VT, WA, CA)
- **Unit of Analysis:** Unique job postings



How to Identify Ghost Posts?

Ghost Posting – (Source: App.Jazz.co)
Posted 25 Times on 3/7/2025

Physical Therapist
OMNI Therapy, Inc. · Malibu, CA (On-site)

About the job

Physical Therapist (PT) for Home Health
Omni Therapy in Malibu, CA.
Professional Opportunity Details: Omni Therapy is looking for a contract Physical Therapist (PT) to evaluate and treat patients in their homes in the Malibu, CA, area.

Did You Know?

- Omni Therapy gives you complete control over your work schedule and accept or decline patients without penalty or pressure
- Omni Therapy takes much of the administrative work off your hands so that you can focus on what you do best - which is providing excellent therapy services to patients in your area
- Don't get bogged down with the details! Just let Omni Therapy know what you need, and we'll take care of it. Whether it's getting more visits for your patients, getting help with properly filling out or submitting a note, or appointment scheduling with your patient... We're standing on the sidelines and ready to help you every step of the way so that you have the support you need to ensure your patients reach their goals
- Our exceptional support staff will keep you updated on any patient changes and alert you when any items are needed to continue your patient's plan of care
- Our dedicated team of care coordinators and case managers step in and assist with completing portions of your notes for you when needed
- Omni Therapy acts as a bridge between our occupational therapy partners and the home health agencies to handle all questions, concerns, or corrections that need to be made on visitation documentation

Company Overview:

- Omni Therapy has provided excellent in-home physical therapy solutions throughout Southern California for 14 years
- Omni Therapy pays you on time, every time, via direct deposit, twice every month
- Omni Therapy takes care of all invoicing for your visits. No need to send us an invoice!
- We will send you a preliminary paystub to review and then we will reliably deposit your money into your account twice every month
- We have weekend support staff consisting of experienced case managers to aid with any questions you may have from
- Omni Therapy uses an innovative tiered referral system designed to provide you with a larger number of referrals within a smaller radius in your preferred territories
- Our therapy partners spend less time in traffic and more time caring for patients. Keep more money in your pocket instead of in your gas tank!
- Omni Therapy offers competitive pay and flexible hours to our therapy partners
- Omni Therapy offers user-friendly web-based electronic documentation and assistance with note submission
- Omni Therapy's messaging app allows therapists to communicate directly with office staff, case managers, and

Real Posting – (Source: Greenhouse)
Posted Once on 3/7/2025

Physical Therapist (PT) Home Health
Health Link Home Health and Hospice Agency - Santa Clara, CA (On-site)

- Company devices

Responsibilities

- Physical Therapist will provide services within the scope of physical therapy, in accordance with the plan of care individualized for the patient, and in coordination with the Interdisciplinary Team
- Physical Therapist will follow plan of care; provides treatment; evaluate patient's reaction to treatment and report any changes in his/her condition to the Physician, Case Manager and/or Director of Nursing
- Maintain appropriate clinical records and/or notes and submit the records with organization policy on company devices.
- Physical Therapists provide supervision to a PTA, if PTA is assigned
- Be responsible for following all company policies and procedures

Pay

\$135,000.00 - \$190,000.00 annually (depending on experience)

- Up to \$15,000 Sign-On Bonus***

Benefits

- Health Insurance
- Dental Insurance
- Vision Insurance
- Life Insurance
- 401(k)
- 401(k) matching
- Paid Time Off

Requirements

- Current PT License to practice in California - Required
- Home Health: 1 year - Preferred
- Current CA Driver's License
- Coverage area San Francisco and surrounding areas.

What the Data Says

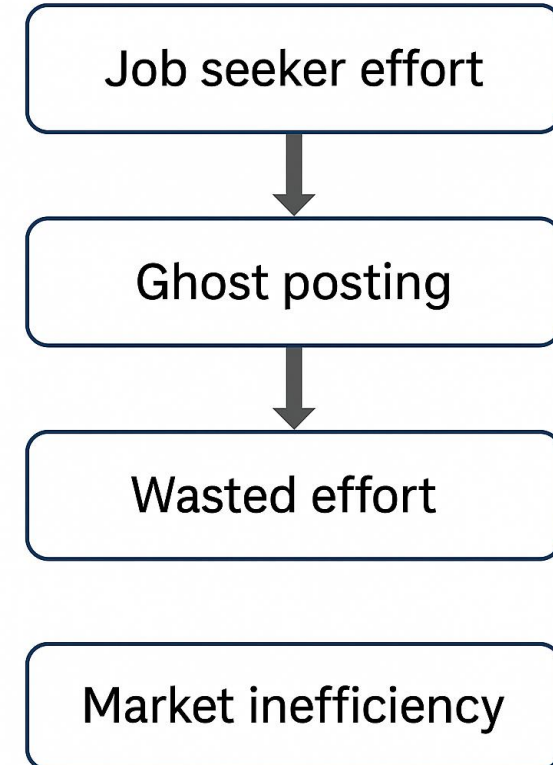
Table 1: Job Postings that Meet Criteria

Criteria	Number of Relevant Posts	% of Total Posts
Criteria 1: Lack of Pay Transparency	6,052	30.1%
Criteria 2: Lacking Valid External URL	14,336	71.4%
Criteria 3: Duplicate Posting	616	3.1%
Criteria 1 & Criteria 2	4,752	23.7%
Criteria 1 & Criteria 3	19	0.1%
Criteria 2 & Criteria 3	239	1.2%
All Criteria	284	1.4%
Total Ghost Posts	5,294	26.4%

Source: CoreSignal Job Postings Data between March 3 - March 7, 2025

Ghost Postings as a Market Distortion

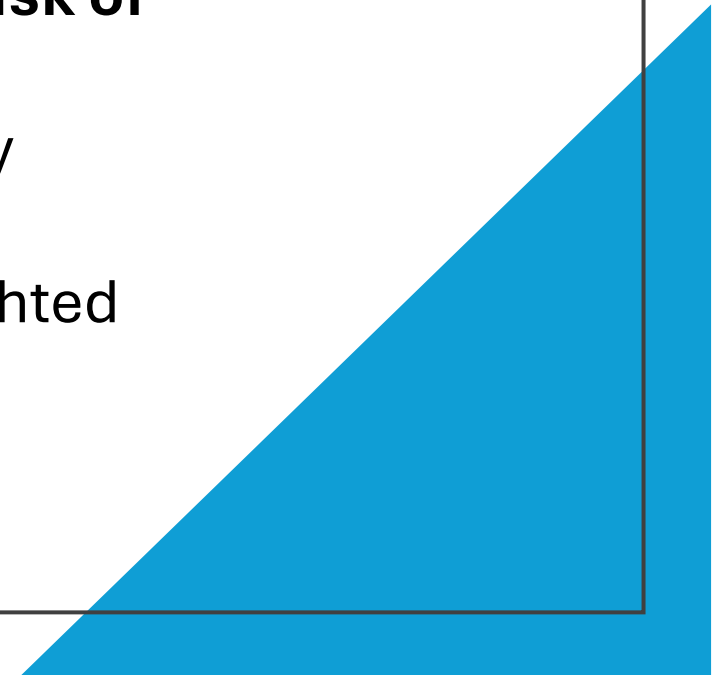
- Many job postings advertise opportunities that **don't exist** → signaling a resource allocation problem under **asymmetric information**
- **The result:** misallocated effort and inefficient matching
- **Objective:** quantify how these false signals create economic deadweight loss in job search efficiency



Modeling Applicant Behavior Under Information Asymmetry

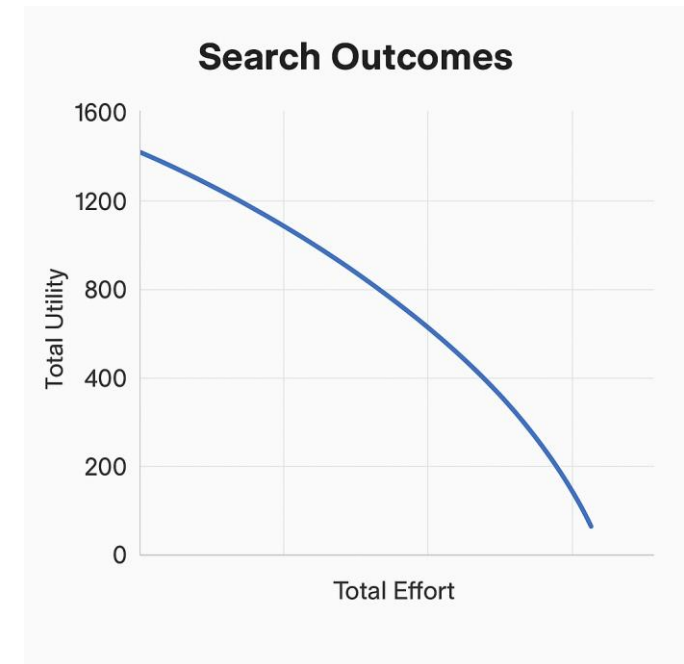
$$u_i = \mu_i(R - e_i) + (1 - \mu_i)(-C - e_i) - \lambda$$

- Applicants choose where to apply based on perceived **job credibility (μ)** and **expected payoff**
- Each application carries a **search cost (effort e)** and **risk of rejection (λ)**
- When ghost postings enter the market, signal reliability declines, leading to excess effort on low-return jobs
- The optimal strategy **minimizes wasted effort** by weighted opportunities by credibility



The Cost of False Signals

- Lucy allocates effort across job openings based on perceived credibility using two approaches (naïve and informed)
- **Naïve search inflates effort** – 3x more applications with lower returns
- Accounting for ghost postings cuts wasted effort but slashes total expected utility
- **Broader implication:** Information asymmetry drives systemic inefficiency



How Are Groups Affected?

Next Question: Who Specifically do ghost postings impact the most?

1. Combine our job posting data with American Community Survey (ACS) demographics

2. Match job titles using a miniLM embedding model

3. Apply logistic regression to predict whether a posting is fraudulent (ghost)

4. Run separate models by race, gender, and education

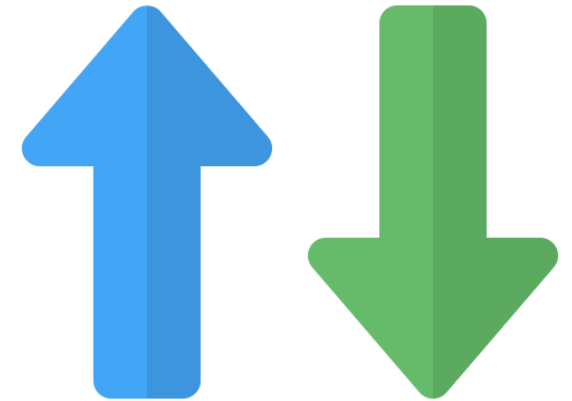
Who is Represented?

Table 3: Regression Variables Summary Statistics

Variable	Number of Observations	Mean	Median	Mode	Standard Deviation	Min	Max
Fraudulent Flag	20,084	0.26	0	0	0.44	0	1
Black or AA Percent	16,382	9.71	11.4	11.4	4.09	3.3	34.8
Hispanic Percent	17,417	14.25	15.4	17.5	6.36	4.0	60.6
Asian Percent	16,487	8.13	6.1	6.1	6.30	1.1	32.4
White Percent	19,952	66.51	64.0	62.2	8.78	30.5	91.4
Total BA Percent	19,736	32.84	25.2	24.9	15.50	2.1	78.4
Total Less Than BA Percent	19,786	49.71	59.8	59.8	23.97	1.0	100.0
Total Grad Percent	19,714	18.06	15.3	15.3	16.77	0.3	100.0
Total Women Percent	19,883	42.13	43.7	43.7	22.05	0.6	97.3

Who Bears the Cost?

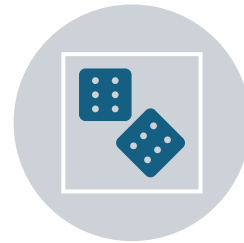
- Regressions:
 - Dependent variable: Whether a job posting was fraudulent (1) or legitimate (0)
 - Independent and control variables: Race, gender, and education measured as percentages of workers.
- A 10% rise in
 - Black workers → **10-14% higher** odds of ghost postings.
 - Hispanic workers → **5-7% higher** odds of ghost postings.
 - White workers → **6-7% lower** odds of ghost postings.
- Education protects jobs where most workers hold a college degree have much **lower fraudulent rates**, while low-education fields are most at risk.



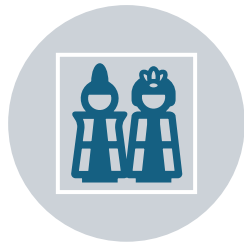
Conclusion and Next Steps



Analysis of LinkedIn job data estimates that about 26% of job postings are fraudulent, aligning with outside research.



Using a signaling game and optimization model, we showed that optimized strategies could reduce applications from 162 to 50, lowering wasted time and stress.



Occupations with higher proportions of Black and Hispanic individuals are disproportionately associated with ghost postings.



While the study is the first to quantify both market inefficiencies and applicant impacts, it calls for larger datasets, demographic-specific research, and stronger legal or regulatory frameworks, as ghost posting practices are likely to evolve and remain difficult to detect.

Questions?

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