

Learning Hiring Preferences - The AI Behind LinkedIn Jobs

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Abstract

LinkedIn's [Recommended Matches](#) delivers candidate recommendations for your open job posting that get more targeted over time based on your feedback. This new algorithm, which is used throughout the Jobs platform, performs nearly 20% better than the previous version in generating recommendations when we simulate our members' past hiring activity. The technique we leverage to train the targeting to get smarter is called "online learning," which is learning that happens in real time as our members use the product. Based on how you interact with candidates, our algorithm learns your preferences and delivers increasingly relevant candidates across the Jobs product. Interactions with an applicant versus interactions with a recommended match may be fundamentally different, and so we explicitly represent the channel in which the candidate was discovered in our machine learning model. This also gives us the ability to incorporate online learning from user feedback across additional channels outside our Jobs product in the future like Recruiter Search. Feedback about candidates is aggregated in real time and associated with the corresponding hiring project. A hiring project represents an opening to be filled, and may have a job post, search queries, candidate feedback, and other useful details associated with it. The impact of these online learning features is profound. In fact, the online learning features are 7 of the top 10 most important features in the model. When comparing a model with online learning versus a model without online learning, we found that online learning features provide 49.61% lift in NDCG@1 (averaged over all search queries, with each search query generating one candidate recommendation).



Biography:

Nadeem Anjum graduated from Indian Institute of Technology, Kharagpur in 2014. He is a Staff Machine Learning Engineer at LinkedIn, USA helping connect recruiters to qualified &



interested job seekers. He has published multiple papers & patents in organizations on repute.

Speaker Publications:

1. "Mutational spectrum of SMPD1 gene in Pakistani Niemann-Pick disease patients"
2. "Mutation spectrum of glucocerebrosidase gene in Pakistani patients with Gaucher disease"
3. "Phenotypic diversity of Niemann-Pick disease type C in Pakistani children"
4. "Clinical characteristics, genotype and outcome of Gaucher disease in Pakistani children"
5. "Pro-Calcitonin and C Reactive Protein as Marker of Infection: Evaluation of Systemic Inflammatory Response Syndrome (SIRS) in Patients with Normal and Impaired Renal Function"

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