Labor markets become more efficient in theory if job seekers direct their search. Using online job board data, we show that high-wage ads attract more applicants as in directed search models. Due to distinctive data features, we also estimate significant but milder directed search for hidden (or implicit) wages, suggesting that ad texts and requirements tacitly convey wage information. Since explicit-wage ads often target unskilled workers, other estimates in the literature ignoring hidden-wage ads may suffer from selection bias. Moreover, job ad requirements are aligned with their applicants’ traits, as predicted in directed search models with heterogeneity.