1. Both are predicted to have the same productivity score of 75 but have the following probabilistic forecasts.

Candidate A as more certainty around the kind of employee he/she is. But Candidate B has a more varied productivity level. Someday he/she is very productive while other days, he/she is not. Depending on the type of job, the hiring manager might want a more predictable employee with known productivity levels rather than someone whose productivity is more uncertain.

1. Two “non-overlapping” forecasts:

Candidate A’s uncertainty is more “certain” around 60, while for B it is likely to fall around 80. On the surface, it might appear than Candidate B is a better choice because the uncertainty in its productivity floats around a higher number. However, the probability density is lower for Candidate B. This means that Candidate A is more predictable at a lower productivity level while candidate B is less predictable around a higher productivity level.

1. You’ve formed a probabilistic forecast for a particular value of the predictors, displayed below as a density. You then collect test data for that same value of the predictor, indicated as the points below the density. What is the problem with the probabilistic forecast?

The forecasts are biased, it is under predicting the actual values. Most of the test values lie in the upper tale of our probabilistic forecast.