**In Class Exercise 8**

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For (1) and (2) below, you’re choosing between two candidates to hire. Discuss the pros and cons of choosing one candidate over the other in the following situations.

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

*Candidate A*

Pro: Stable work performance. There is very low probability that Candidate A will have really high productivity or very low productivity

Con: When the company needs very high productivity, Candidate A can not meet the need since there is no possibility that Candidate A will have productivity higher than 78.

Certain that Candidate A will have 75

*Candidate B*

Pro: Candidate B have higher probability to have productivity score higher than 75, therefore, when company have needs on high productivity, Candidate B is able to meet the needs.

Con: Candidate B also have probability that work lower than 75 productivity score, which will affect the productivity for company.

Uncertainty; Density = Probability

In conclusion, I will choose Candidate A. Our believe on prediction

1. Two “non-overlapping” forecasts:

*Candidate A*

Pro: Candidate A have a stable work performance at 60 productivity score

Con: The productivity of Candidate A is always lower than that of Candidate B

*Candidate B*

Pro: Candidate B in general have higher productivity than productivity of Candidate A

Con: Candidate B have more variance, so Candidate B has relative unstable productivity

In conclusion, I will choose Candidate B.

1. You’ve formed a probabilist 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?

Biased probabilistic forecast, reduce window k