

From: "Heppen, Dave"
Date: February 4, 2022 at 4:49:26 PM CST
To: "DeFrain, Kris"
Subject: RE: CASTF Exposure - Review of Random Forest Models

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Kris,

We wanted to provide you with the following comments on this exposure:

1. We thought the additional guidance on Random Forests was very well done, and we particularly thought items B.3.1-B.3.3, B.3.f, B.4.h, and B.4.k were helpful.
2. Regarding item B.2.a, we suggest adding guidance along the lines below:
The narrative should include a description of each hyperparameter, document the values of the hyper parameters, specify the implication of using a higher or lower value for each hyper parameter, and discuss any sensitivity testing completed on the hyper parameters and observations from the sensitivity analysis.
3. Regarding consistency between the Appendix and the glossary, "pruning" is defined in the glossary but does not appear to be covered in the Appendix. We believe this term would fit well with B.4.h on overfitting; this could be accomplished with language along the lines below:
If pruning was utilized to address overfitting, the narrative should provide commentary on the pruning process.

Thank you for the opportunity to comment on this!

Thanks,

Dave

David Heppen, FCAS, MAAA
Partner

Risk & Regulatory Consulting, LLC
20 Batterson Park Road / Suite 380 / Farmington, CT 06032
D: 610.247.8019 | **E:** dave.heppen@riskreg.com