



Figure 1: Performance of ALL (blue trace, ours) for budget hyperparameter $\bar{\gamma} \in \{0.05, 0.1, 0.15, \dots, 0.95\}$, measured using the oSNR metric (**larger is better**). Note that the set of valid values for $\bar{\gamma}$ is $(0, 1)$. Observe that while performance varies significantly with $\bar{\gamma}$, for all datasets except for AES-HD (challenging for all deep learning methods) the performance varies smoothly and remains significantly better than random chance; thus, $\bar{\gamma}$ is not excessively challenging to tune. For reference, we also plot horizontal lines and error bars corresponding to random guessing and the *best* parametric and neural net attribution methods, as indicated in the legend. We leave hyperparameters other than $\bar{\gamma}$ fixed at their optimal values chosen through random search as described in Appendix C.3.3. Dotted lines denote mean and shading denotes median over 5 random seeds. The peak performance of our method here exceeds the numbers in table 4, because table 4 corresponds to results after a 50-trial random hyperparameter search over all hyperparameters, and these sweeps are an additional grid search over $\bar{\gamma}$ after this initial search.