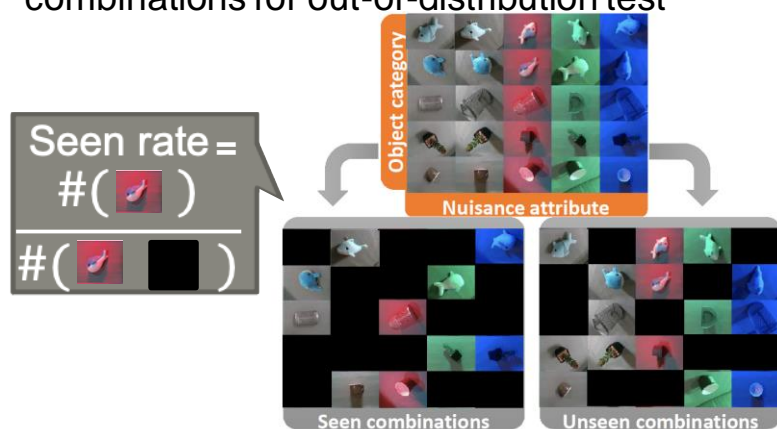


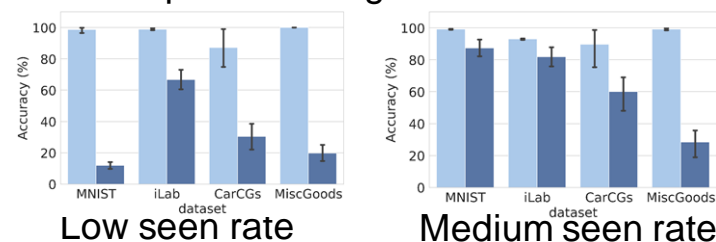
Akira Sakai, Taro Sunagawa, Spandan Madan, Kanata Suzuki, Takashi Katoh, Hiromichi Kobashi, Xavier Boix, Tomotake Sasaki

- Datasets for object classification with nuisance factor labels

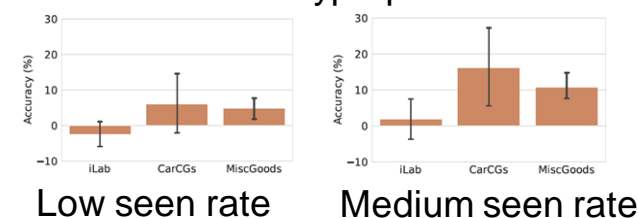
- Bias controlled experiments: split a dataset to seen combinations for training and unseen combinations for out-of-distribution test



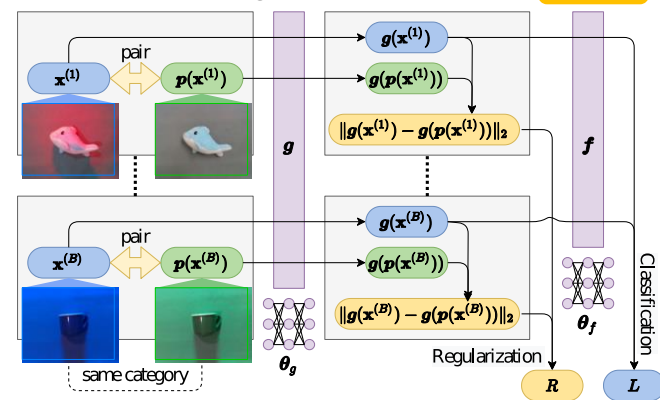
- Spurious correlations by nuisance factor caused up to 80% degradation in ResNet-18



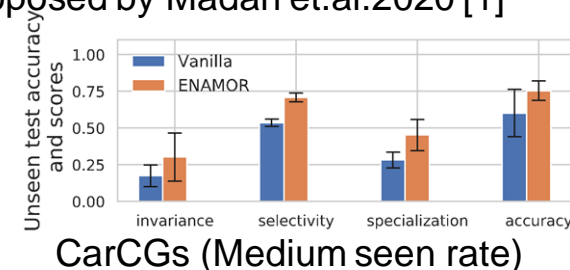
- ENAMOR achieved up to 20% recovery (MNIST was used for hyperparameter search)



- Using pairs of images (x $p(x)$) to calculate Regularization term R



- ENAMOR increased the invariance score proposed by Madan et.al.2020 [1]



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