


Feature Importance

Individual Feature Importance


Interpreting Deep Learning Models


Quiz: ML Interpretation

Assignment: ML Interpretation

 **Programming Assignment:** ML Interpretation  
3h

Acknowledgments

 **Reading:** Acknowledgements  
10 min

 **Reading:** Citations  
10 min



# Citations

## Week 1

- Levamisole and fluororacil background: <https://www.nejm.org/doi/full/10.1056/NEJM199002083220602>
- Data sourced from here: <https://www.rdocumentation.org/packages/survival/versions/3.1-8/topics/colon>
- C-statistic for benefit: <https://www.ncbi.nlm.nih.gov/pubmed/29132832>
- T-learner: <https://arxiv.org/pdf/1706.03461.pdf>

## Week 2

- Grad cam: <https://arxiv.org/pdf/1610.02391.pdf>
- Random forests + permutation importance: <https://www.stat.berkeley.edu/~breiman/randomforest2001.pdf> (**R45f14345c000-1** Breiman, “Random Forests”, Machine Learning, 45(1), 5-32, 2001.)
- Shapley importance: <https://www.nature.com/articles/s42256-019-0138-9>

## Week 3

- Labeling methods and dataset: <https://arxiv.org/abs/1901.07031>
- Huggingface transformers library: <https://github.com/huggingface/transformers>
- BERT paper: <https://arxiv.org/abs/1810.04805>
- Question answering data set (used for example): <https://rajpurkar.github.io/SQuAD-explorer/>

Clinical note example for question answering: <https://www.mtsamples.com/>

Mark as completed

