Assessing wine quality

COURSERA ADVANCED CAPSTONE
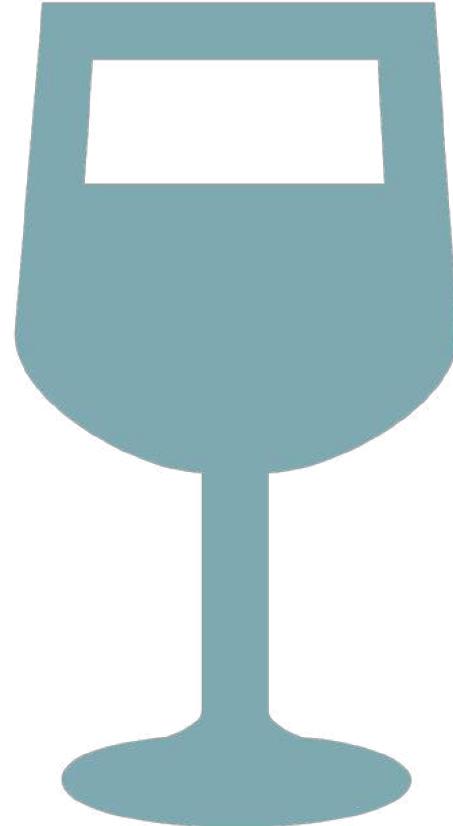
Vineyards always collect and sample their products
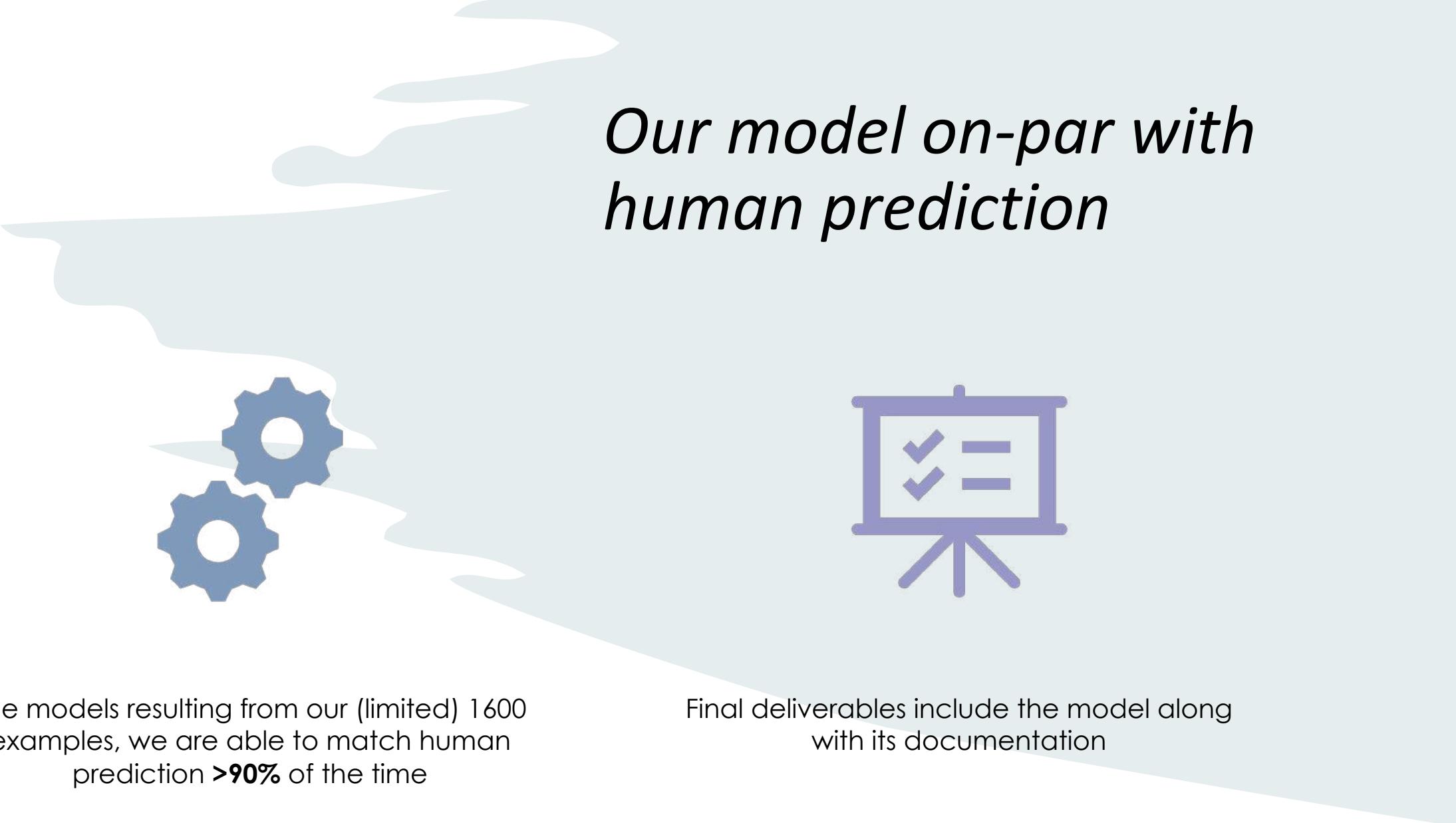
|	fixed acidity	volatile acidity	citric acid	residual sugar	chlorides	free sulfur dioxide	total sulfur dioxide	density	pH	sulphates	alcohol	quality
0	7.4	0.70	0.00	1.9	0.076	11.0	34.0	0.9978	3.51	0.56	9.4	5
1	7.8	0.88	0.00	2.6	0.098	25.0	67.0	0.9968	3.20	0.68	9.8	5
2	7.8	0.76	0.04	2.3	0.092	15.0	54.0	0.9970	3.26	0.65	9.8	5
3	11.2	0.28	0.56	1.9	0.075	17.0	60.0	0.9980	3.16	0.58	9.8	6
4	7.4	0.70	0.00	1.9	0.076	11.0	34.0	0.9978	3.51	0.56	9.4	5

Dataset contains 1600 wine batches, chemically analysed (Cortez et al., 2009)
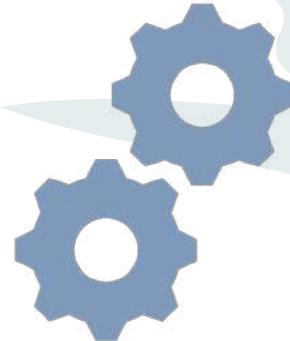
# All stakeholders to benefit from automatic quality assessment

- Today, wine batches are quality assessed manually, taking time and making them susceptible to bias

- With our model, this can be made automatic based solely on the physiochemical properties(!)

Our model on-par with human prediction

The models resulting from our (limited) 1600 examples, we are able to match human prediction **>90%** of the time

Final deliverables include the model along with its documentation