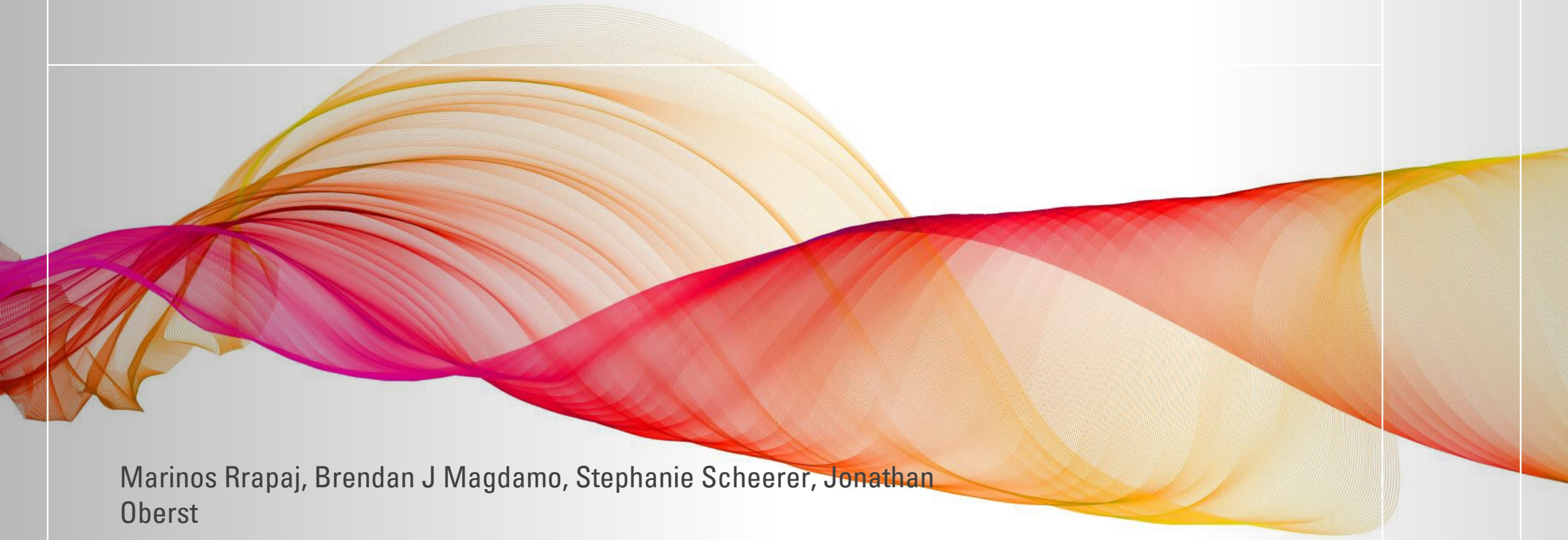
Lab 1



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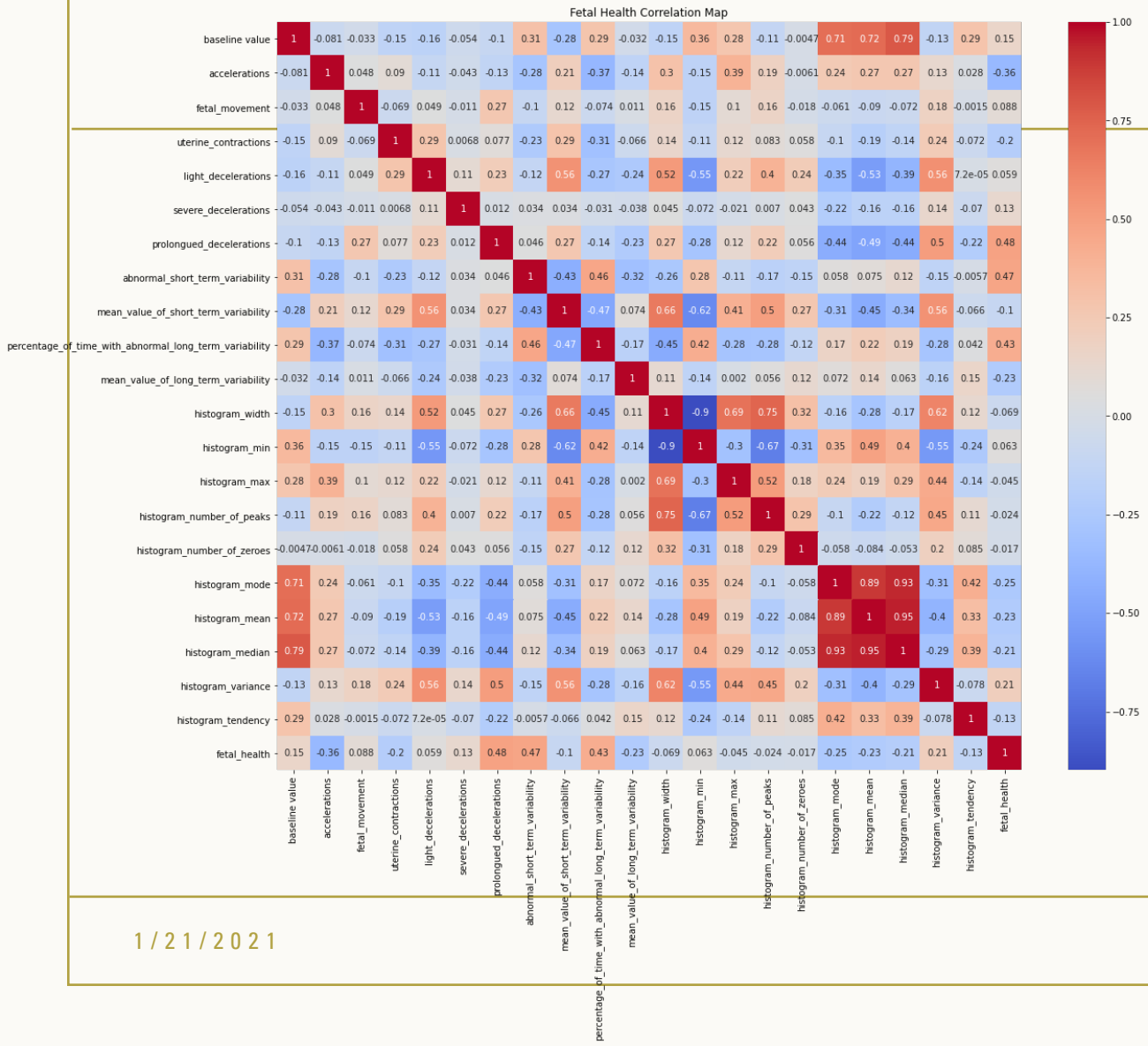
Model Description

- For one of our models, we used k-nearest neighbors to train and fit the data. Using a k=7 value gave us an 84% accuracy without overfitting the data, since there is not that much to start with
- Trying out different parameters as well resulted in similar accuracy so we felt that it was the best we can achieve with this model.
- Our original model was a support vector machine that used an RBF kernel. This model achieved up to 80% accuracy with a weighted F1 score of about 0.7. This model is only slightly more accurate than just predicting 1 for every test case.

Visualization



Correlation heatmap showing which of the features are more correlated to fetal_health at the bottom.

Link

- https://github.com/Inceptix/CIS-4496-Project1

Challenges Faced

- Getting everyone connected to the GitHub repo
- Creating a feasible model
- Figuring out how to allow push access
- Plotting some of the visuals for the models