Diabetic Retinopathy Analysis

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Overview

- Improve current method for diabetic retinopathy diagnosis

- Create model that reads retinal images to determine diabetic retinopathy or not
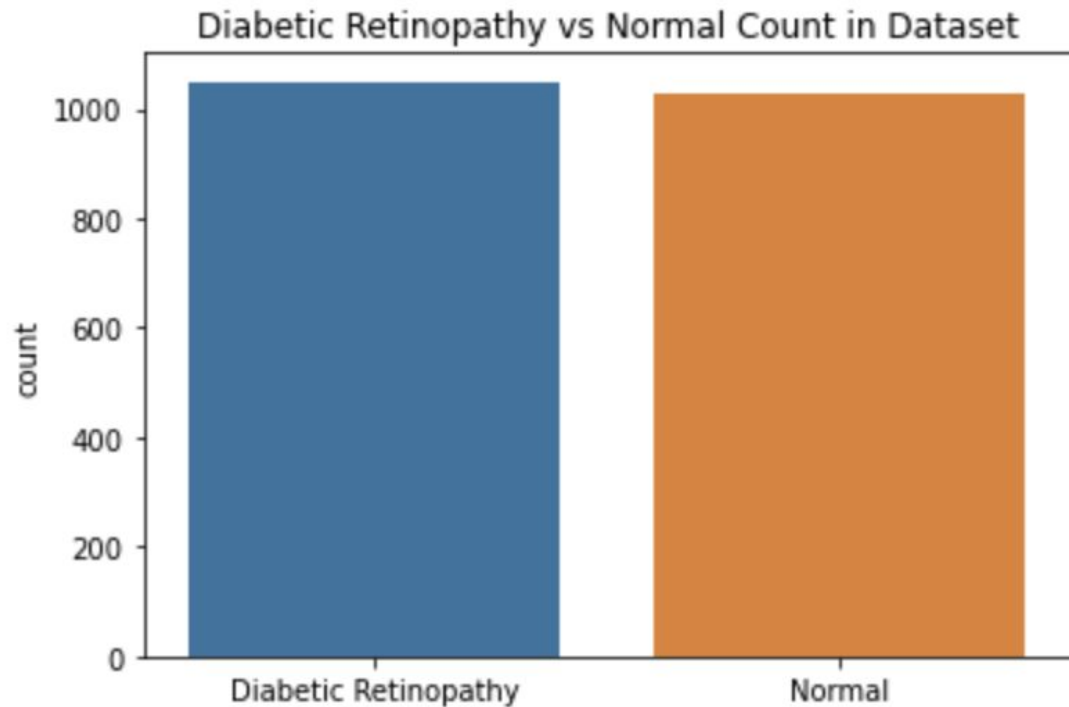
Outline

- Business Problem

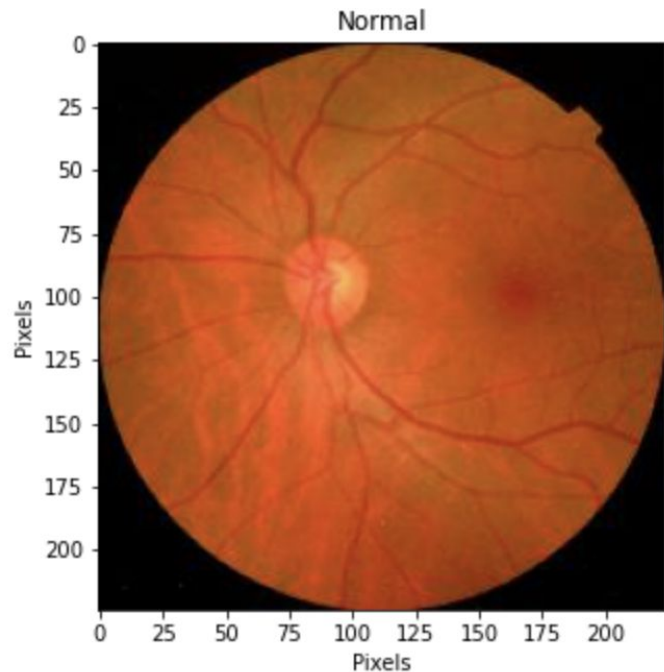- Modeling

- Evaluation

- Conclusion

Business Problem

- Hospital wants to reduce time and error reviewing retinal images
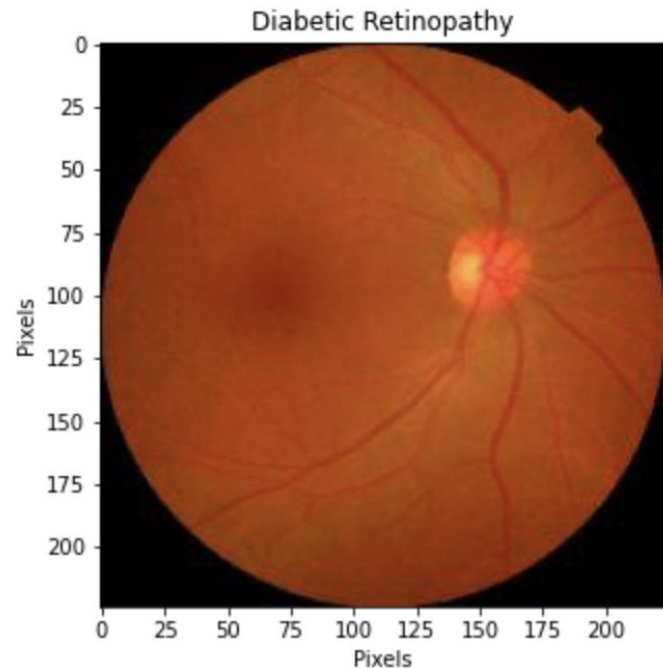
Data

Diabetic Retinopathy vs Normal Count in Dataset

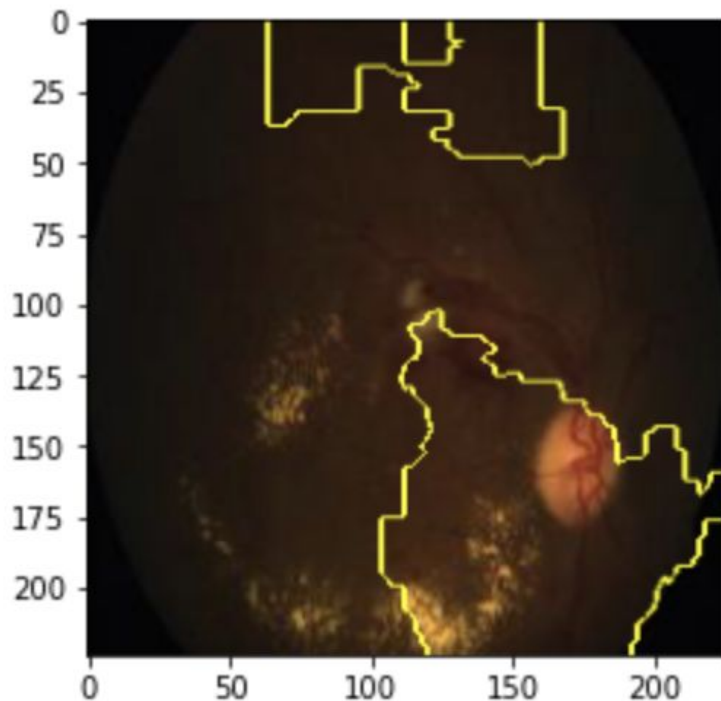- Retinal images from Kaggle

Modeling

Normal

Diabetic Retinopathy
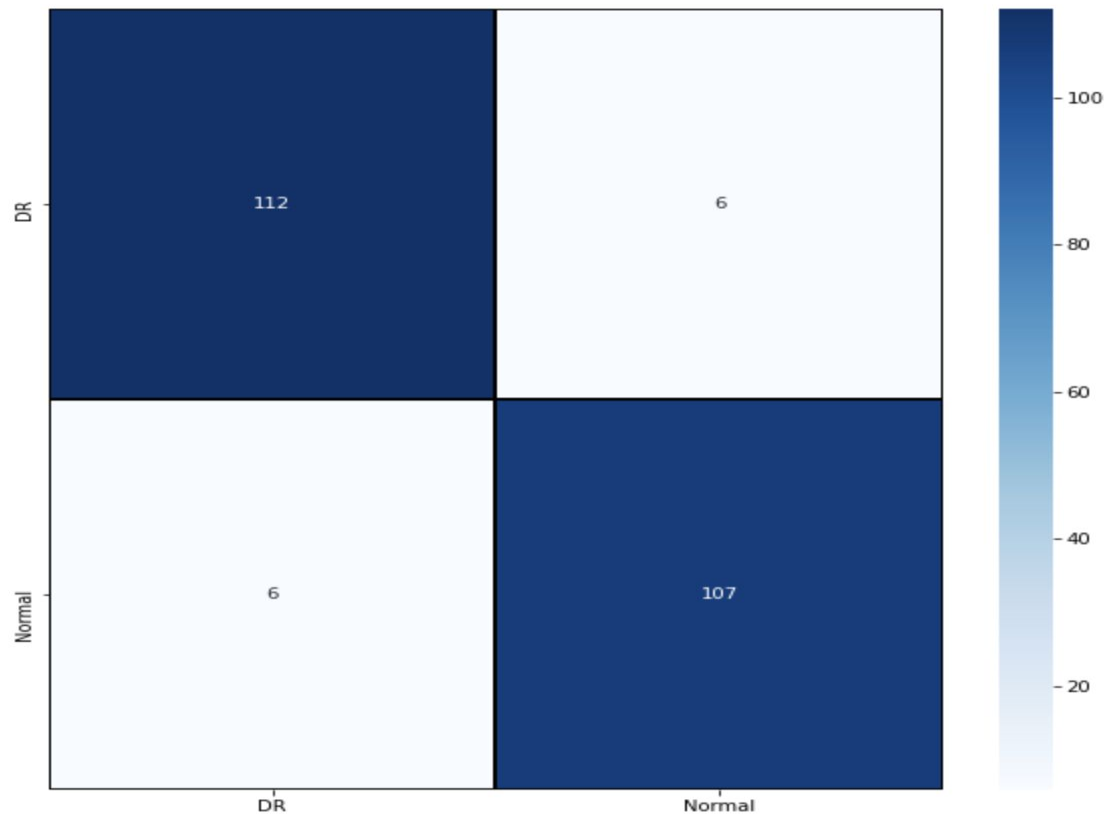
- Iterating through deep learning networks

Evaluation

- VGG19 model with recall score of 95%

- Using LIME to aid diagnosis assistance

Evaluation

Conclusion

- Use VGG19 model

- Help opthamologist save time

- Use LIME to aid diagnosis assistance

Thank you!

Questions?

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