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## **Final project report**

**Advanced Machine Learning**

Prof. Dr. Köthe

# **SIIM-FISABIO-RSNA COVID-19 Detection**

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# 1 Introduction and problem definition

## 1.1 Kaeggle Challenge

WRITTEN BY TORBEN

## 1.2 Related Work

WRITTEN BY JULIAN

COVIDNET beste [1]

## 1.3 Proposed Solution

WRITTEN BY TOBIAS

just a short introduction to our solution, models will be convered in 3 on page 3

## 2 Data

### 2.1 NIH Data

WRITTEN BY TOBIAS

### 2.2 RSNA Data

WRITTEN BY ?

### 2.3 SIIM COVID-19 Data

WRITTEN BY ?

## **3 COVID-19 Detection**

### **3.1 FasterRCNN**

WRITTEN BY TOBIAS

### **3.2 YOLO**

WRITTEN BY JULIAN

### **3.3 Study-Level model**

WRITTEN BY TORBEN

# 4 Evaluation

## 4.1 Evaluation of RESNET

WRITTEN BY TOBIAS

accuracy, f1, usw.

## 4.2 Evaluation of FasterRCNN and YOLO

WRITTEN BY JULIAN

## 4.3 Evaluation of Study-Level Model

WRITTEN BY TORBEN

# 5 Proposed web application

WRITTEN BY TOBIAS !

# 6 Conclusion

WRITTEN BY ALL



# References

- [1] L. Wang, Z. Q. Lin, and A. Wong, “Covid-net: A tailored deep convolutional neural network design for detection of covid-19 cases from chest x-ray images,” *Scientific Reports*, vol. 10, no. 1, pp. 1–12, 2020.