

Heidelberg University
Institute of Computer Science

Project report for the lecture Advanced Machine
Learning

Prediction of the next
SARS-CoV-2 variants

<https://github.com/nilskre/AML-covid-project>

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tbd

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tbd

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List of Abbreviations

CUDA	Compute Unified Device Architecture
DQN	Deep Q-Networks
ELU	Exponential Linear Unit
ICAART	International Conference on Agents and Artificial Intelligence
MDP	Markov Decision Process
ReLU	Rectifier Linear Unit
PER	Prioritized Experience Replay
PPO	Proximal Policy Optimization

0 Project Setup

TODO: update For a detailed description of how to set up the project, please have a look at https://github.com/nilskre/bomberman_rl/blob/master/README.md.

1 Introduction

tbd

2 Fundamentals and Related Work

tbd

3 Approach

TODO: Pipeline image

3.1 Dataset creation

3.1.1 tbd

3.1.2 tbd

3.2 Data Preprocessing

3.2.1 tbd

3.2.2 tbd

3.2.3 tbd

3.3 Model architecture

3.4 Training process

4 Experimental results

tbd

5 Conclusion

tbd