AutoML Framework Questionnaire

* Erforderlich

General

1. Use Case *

2. Which ML problem class was solved? *

3. Which data types were used? *

4. Framework *

Performance criteria

5. Quality of results *

	Very Bad	Bad	Good	Very Good	Not relevant
Predictive Power	◯	◯	◯	◯	◯
Inference Time	◯	◯	◯	◯	◯
Model Size	◯	◯	◯	◯	◯
Model Complexity	◯	◯	◯	◯	◯
Resulting Model Type	◯	◯	◯	◯	◯
Interpretability / Explainabilty	◯	◯	◯	◯	◯
Training Time	◯	◯	◯	◯	◯

6. Resource utilization during optimization *

	Very Bad	Bad	Good	Very Good	Not relevant
CPU	◯	◯	◯	◯	◯
(V)RAM	◯	◯	◯	◯	◯
Disk	◯	◯	◯	◯	◯
Accelerator	◯	◯	◯	◯	◯

7. Compliance with limits *

	Very Bad	Bad	Good	Very Good	Not relevant
Trainings Budget	◯	◯	◯	◯	◯
CPU	◯	◯	◯	◯	◯
(V)RAM	◯	◯	◯	◯	◯
# Accelerators	◯	◯	◯	◯	◯
Disk	◯	◯	◯	◯	◯

8. Were a disproportionate amount of resources required? *

9. Does performance improve with a higher budget? *

User friendliness

10. How easily could the framework be installed? *

0	1	2	3	4	5	6	7	8	9	10

Not at all easy — Extremely easy

11. How did the framework have to be installed? *

- ◯ Code aus Reposity
- ◯ Package Manager
- ◯ Precompiled Binary Download
- ◯ Compile Code Yourself

12. Were there any problems during the installation? *

13. Did system libraries need to be installed? *

14. Is source code available? *

- ◯ Yes
- ◯ No

15. What is the quality of the source code? *

0	1	2	3	4	5	6	7	8	9	10

Extremely bad — Extremely good

16. Is there support for accelerator hardware? *

- ◯ Yes
- ◯ No
- ◯ Not relevant

17. Is the framework compatible with existing Python environments? *

- ◯ Yes
- ◯ With minor adjustments
- ◯ With big adjustments
- ◯ No

18. How helpful was the documentation during the induction process? *

0	1	2	3	4	5	6	7	8	9	10

Not at all Extremely

19. Quality of documentation *

	Very Bad	Bad	Good	Very Good	Not Relevant
The docu is easy to find	◯	◯	◯	◯	◯
The docu is up to date	◯	◯	◯	◯	◯
API Docu is available	◯	◯	◯	◯	◯
Code Examples are available	◯	◯	◯	◯	◯
Possibility to get help from community	◯	◯	◯	◯	◯
Possibility to get help from developers	◯	◯	◯	◯	◯

20. How good is the API? *

0	1	2	3	4	5	6	7	8	9	10

Not Good at all Extremely Good

21. API quality *

	Very Low	Low	High	Very High	Not Relevant
Amount of Boilerplate Code	◯	◯	◯	◯	◯
Configurability	◯	◯	◯	◯	◯
Amount of Feedback	◯	◯	◯	◯	◯
Quality of Feedback	◯	◯	◯	◯	◯

22. Are the log files helpful? *

0	1	2	3	4	5	6	7	8	9	10

Not helpful at all

Extremely helpful

23. Required prior knowledge *

	Very Low	Low	High	Very High	None
ML Algorithms	◯	◯	◯	◯	◯
Optimization Strategies	◯	◯	◯	◯	◯
AutoML Concept Levels	◯	◯	◯	◯	◯
Data Preprocessing	◯	◯	◯	◯	◯
Programming Skills	◯	◯	◯	◯	◯

Use Case Criteria

24. Could the use case be implemented? *

- ◯ Yes
- ◯ No

25. If no, what were the issues?

26. Used AutoML layer *

- ◯ HPO
- ◯ CASH
- ◯ Complete Pipeline

27. Were adjustments to the framework required? *

	Yes	No	Not relevant
Models	◯	◯	◯
Search strategies	◯	◯	◯
Metrics	◯	◯	◯
Parallelization	◯	◯	◯
Data Types	◯	◯	◯
Data Volume	◯	◯	◯
Problem Formulation	◯	◯	◯

28. If yes, what exactly and how complex was it?

29. Adjustments to the framework *

- ◯ No adjustments
- ◯ The framework had to be adapted
- ◯ The problem definition (e.g. data used) had to be adapted

30. What is missing / What do you wish were available?

Lessons Learned

31. Overall assessment from the framework *

How would you overall rate the framework?

0	1	2	3	4	5	6	7	8	9	10

Very bad Very good

32. Advantages of the framework

33. Disadvantages of the framework

34. Further comments