



✓ **Congratulations! You passed!**

TO PASS 80% or higher

Keep Learning

GRADE
100%

Machine Learning in the Real World Review

LATEST SUBMISSION GRADE

100%

1. Machine learning systems do things like mistake a woman's hair for a cat, or think that the name of a band from Montreal could be part of a familiar saying because:

1 / 1 point

- ☐ The question the QuAM was answering was too specific
- ☐ QuAMs are able to generalize
- ☒ They might have had limited training data

✓ **Correct**

Correct! The amount of training data impacts the accuracy of the system.

- ☒ Because of the learning algorithm being used

✓ **Correct**

Correct! The kinds of answers a QuAM gives depend heavily on the learning algorithm used to build them.

2. Why are features important?

1 / 1 point

- ☐ They describe important characteristics of the data.
- ☐ They are used by a QuAM to distinguish between categories
- ☐ They can filter out irrelevant data
- ☒ All of the above

✓ **Correct**

Correct! Features capture signal from the raw data, and are used by the QuAM to perform its task. One function of features can be to filter out irrelevant information.

3. What are some of the considerations you need to keep in mind about your QuAM for when you're using it on operational data? (click all that apply)

1 / 1 point

- ☐ For all applications, the effects of the QuAM are far less relevant than what the system costs
- ☒ For some applications like legal rulings, explainability is important

✓ **Correct**

Correct, some applications may require models to be human-interpretable.

- ☒ For some applications, the QuAM's performance must be verified, which may mean setting up a parallel system

✓ **Correct**

Correct! Running a QuAM on live data to verify performance against the existing system can be useful.

- ☒ For some applications there is a minimum standard of accuracy needed, and less than that standard makes the QuAM useless

✓ **Correct**

Correct! You should consider what level of accuracy you need for your QuAM to be useful in operation.

- ☐ For some applications like medical diagnosis, the bedside manner of the QuAM is more important than accuracy.

- ☒ For some applications, the operations of the QuAM can cause the operating environment to change, making the QuAM inaccurate or ineffective.

✓ **Correct**

✓ **Correct**

Correct! You need to consider how use of the QuAM will change the operating environment.

4. What are some of the important questions when it comes to QuAM performance and business evaluation? (check all that apply)

1 / 1 point

- ☒ What is ideal performance?

✓ **Correct**

Correct! Good job!

- ☒ What is acceptable performance?

✓ **Correct**

Correct! Good job!

- ☐ Are you using the latest technology?

- ☒ Are you measuring what you think you're measuring?

✓ **Correct**

Correct! Good job!

- ☐ How do we get perfect performance?

- ☒ What does success look like?

✓ **Correct**

Correct! Good job!

- ☒ What is the cost of making a mistake?

✓ **Correct**

Correct! Good job!

- ☒ How are you performing by your current metrics?

✓ **Correct**

Correct! Good job!

5. What should you prefer a simple proxy?

1 / 1 point

- ☐ It is easier to measure.
- ☐ Improvements in a simple metric are likely to be real improvements to start with.
- ☐ A simple proxy is easier to validate as measuring what you think it's measuring.
- ☒ All of the above

✓ **Correct**

Correct, well done!