← # Introduction
Quiz, 5 questions

| 1 point |

1. A computer program is said to learn from experience E with

respect to some task T and some performance measure P if its

performance on T, as measured by P, improves with experience E.

Suppose we feed a learning algorithm a lot of historical weather

data, and have it learn to predict weather. In this setting, what is T?

○ The probability of it correctly predicting a future date's weather.

○ None of these.

○ The process of the algorithm examining a large amount of historical weather data.

○ The weather prediction task.

<table>
<tr><td>1<br>point</td><td>2.</td><td>Suppose you are working on weather prediction, and use a learning algorithm to predict tomorrow's temperature (in degrees Centigrade/Fahrenheit).</td></tr>
</table>

Would you treat this as a classification or a regression problem?

- ( ) Classification

- ( ) Regression

---

<table>
<tr><td>1<br>point</td><td>3.</td><td>Suppose you are working on stock market prediction. You would like to predict whether or not a certain company will win a patent infringement lawsuit (by training on data of companies that had to defend against similar lawsuits). Would you treat this as a classification or a regression problem?</td></tr>
</table>

- ( ) Regression

- ( ) Classification

---

<table>
<tr><td>1<br>point</td><td>4.</td><td>Some of the problems below are best addressed using a supervised learning algorithm, and the others with an unsupervised learning algorithm. Which of the following would you apply supervised learning to? (Select all that apply.) In each case, assume some</td></tr>
</table>

appropriate dataset is available for your algorithm to learn from.

- ☐ Given genetic (DNA) data from a person, predict the odds of him/her developing diabetes over the next 10 years.

- ☐ Examine a large collection of emails that are known to be spam email, to discover if there are sub-types of spam mail.

- ☐ Take a collection of 1000 essays written on the US Economy, and find a way to automatically group these essays into a small number of groups of essays that are somehow "similar" or "related".

- ☐ Examine the statistics of two football teams, and predict which team will win tomorrow's match (given historical data of teams' wins/losses to learn from).

---

| 1 point |

5. Which of these is a reasonable definition of machine learning?

- ○ Machine learning is the field of allowing robots to act intelligently.

- ○ Machine learning is the field of study that gives computers the ability to learn without being explicitly programmed.

- ○ Machine learning is the science of programming computers.

- ○ Machine learning learns from labeled data.

☐ I understand that submitting work that isn't my own may result in permanent failure of this course or deactivation of my Coursera account.

Learn more about Coursera's Honor Code

Enter your legal name

Submit Quiz

👍  👎  ⚐