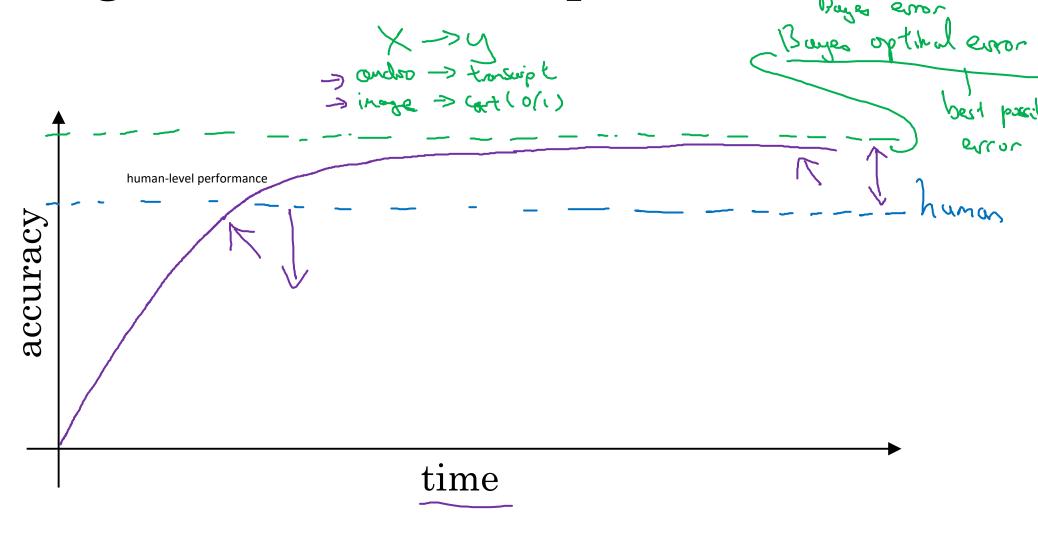


Comparing to human-level performance

Why human-level performance?

Comparing to human-level performance



the performance approaches but never surpasses some theoretical limit, which is called the Bayes optimal error(think of the best possible error).

And Bayes optimal error, or Bayesian optimal error, or sometimes Bayes error for shot, is the very best theoretical function for mapping from x to y that can never be surpass.

Why compare to human-level performance

Humans are quite good at a lot of tasks. So long as ML is worse than humans, you can:

- → Get labeled data from humans. (४,५)
- Gain insight from manual error analysis: Why did a person get this right?
- Better analysis of bias/variance.

But so long as your algorithm is still doing worse than humans, you have these important tactics for improving your algorithm. Whereas once your algorithm is doing better than humans then these three tactics are harder to apply.