



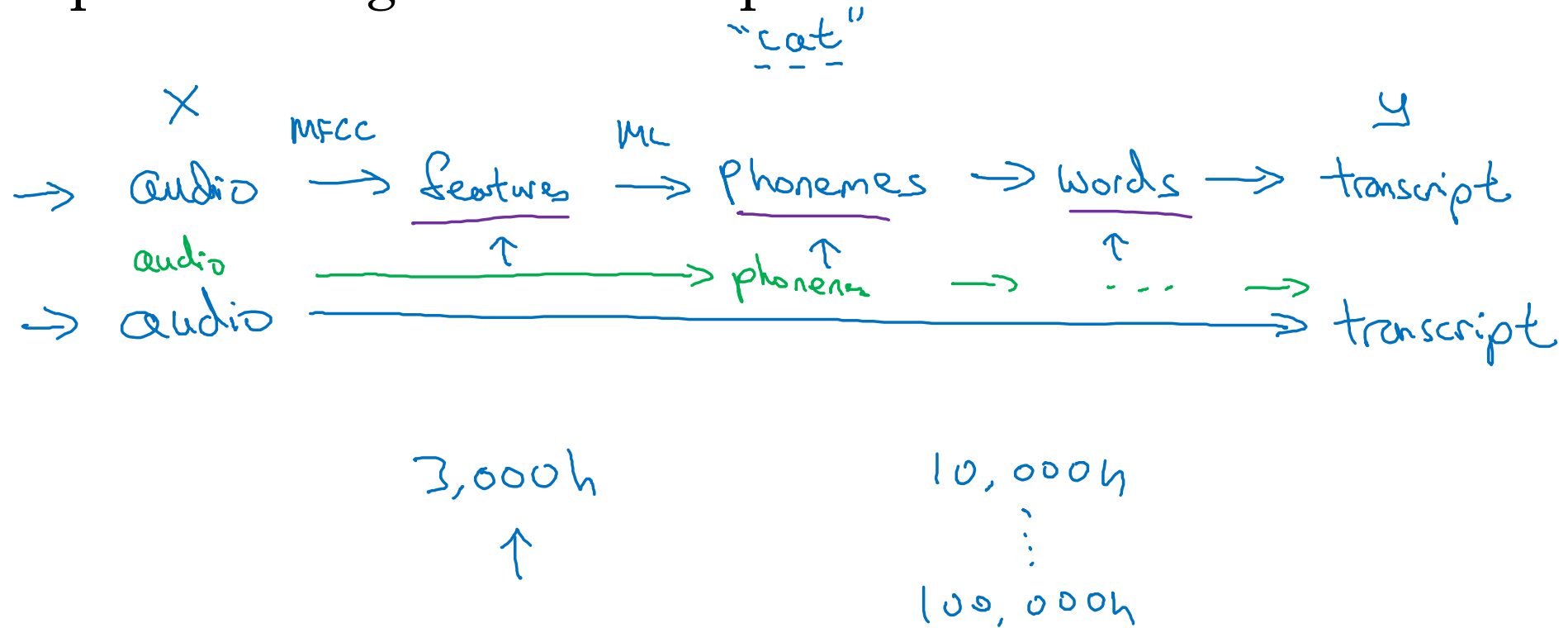
deeplearning.ai

End-to-end deep
learning

What is
end-to-end
deep learning

What is end-to-end learning?

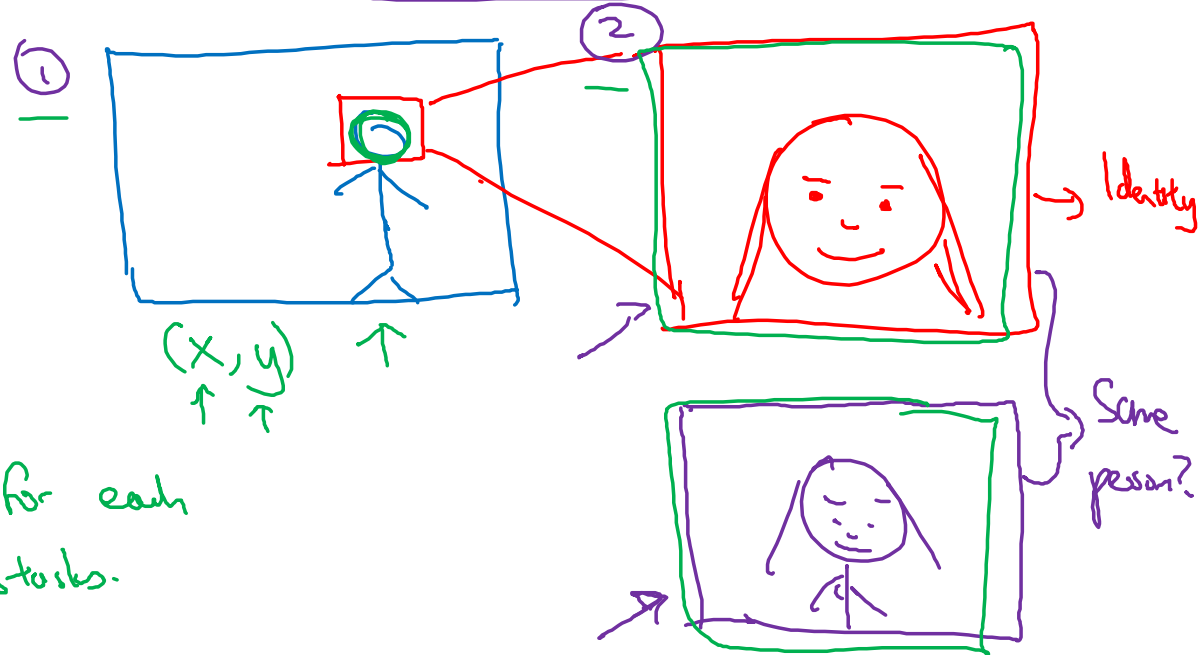
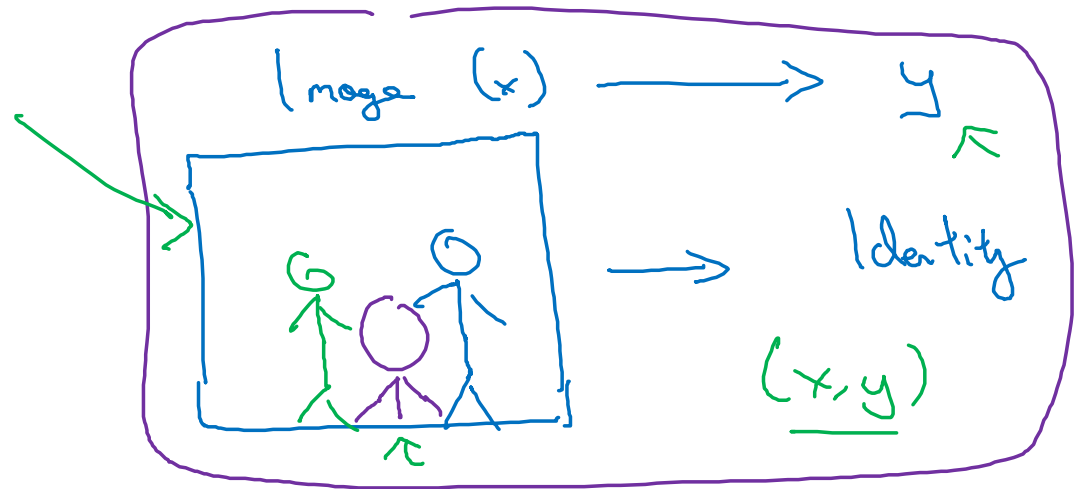
Speech recognition example



Face recognition



[Image courtesy of Baidu]



Have data for each
of 2 subtasks.

More examples

Machine translation

(x, y)
English \nearrow \nwarrow French

English \rightarrow text analysis $\rightarrow \dots \rightarrow$ French
English $\xrightarrow{\hspace{10em}}$ French

Estimating child's age:



Image $\xrightarrow{\textcircled{1}}$ bones $\xrightarrow{\textcircled{2}}$ age

Image $\xrightarrow{\hspace{10em}}$ age \leftarrow