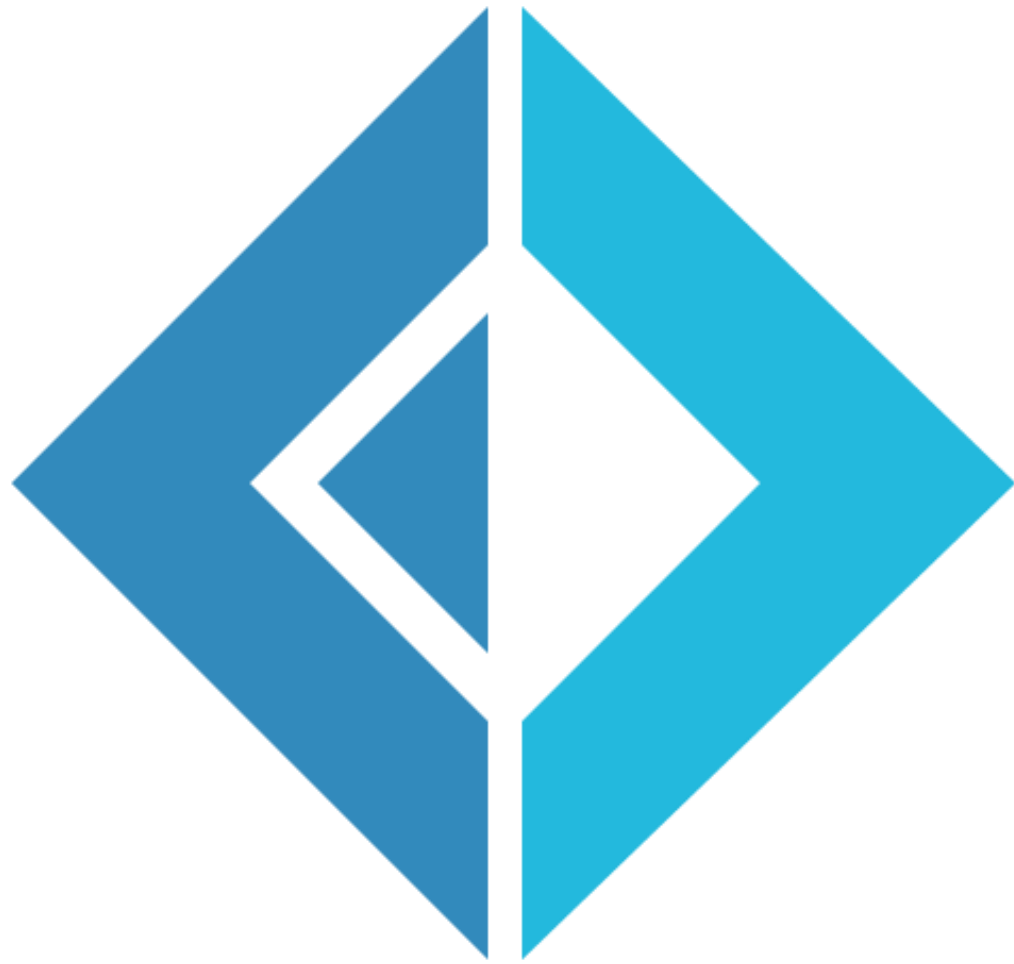


Machine learning the F# way

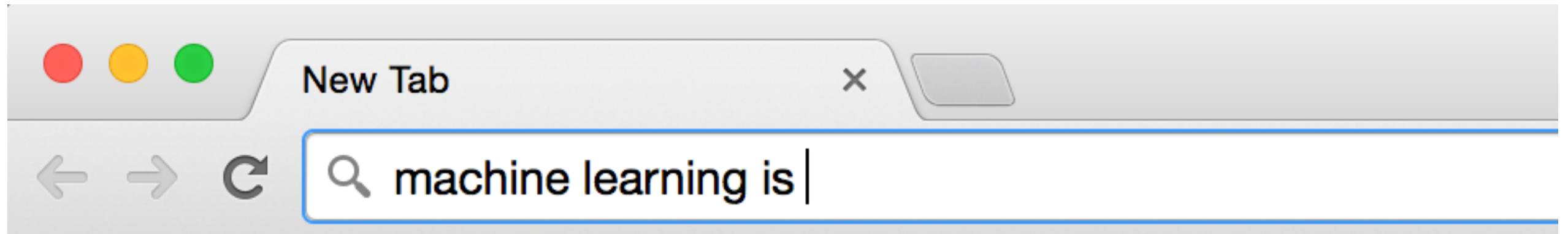
Evelina Gabasova

Progressive .NET tutorials, London 2015



With F# *about* F#

Machine learning

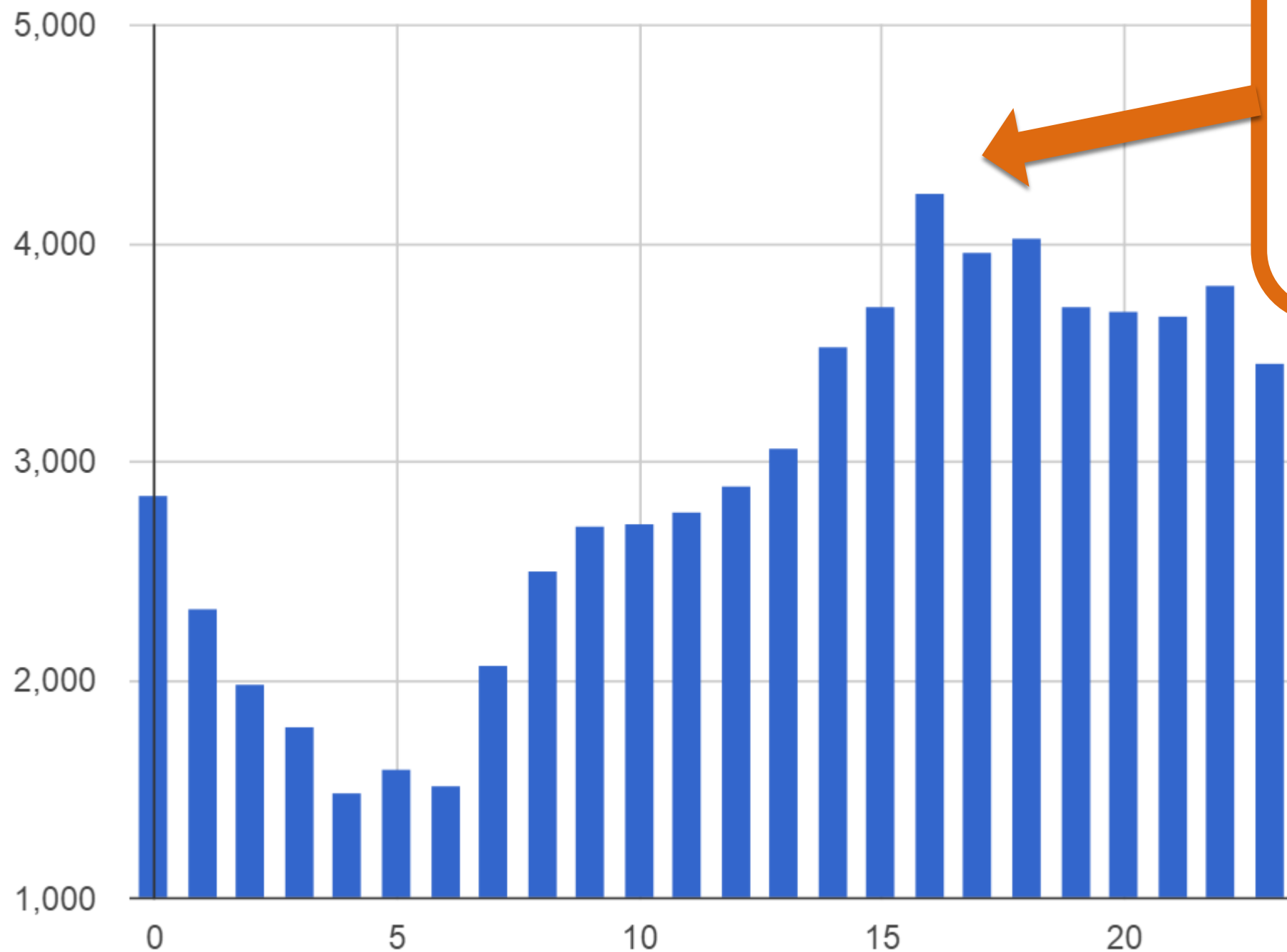


- 🔍 machine learning is - Google Search
- 🔍 machine learning is **the future**
- 🔍 machine learning is **fun**
- 🔍 machine learning is **hard**
- 🔍 machine learning is **the new algorithms**
- 🔍 machine learning is **not as cool as it sounds**

What is the
community's
dynamics?



When do people tweet?



16:00 in London

11:00 in New York

8:00 in San Francisco

0:00 in Tokyo

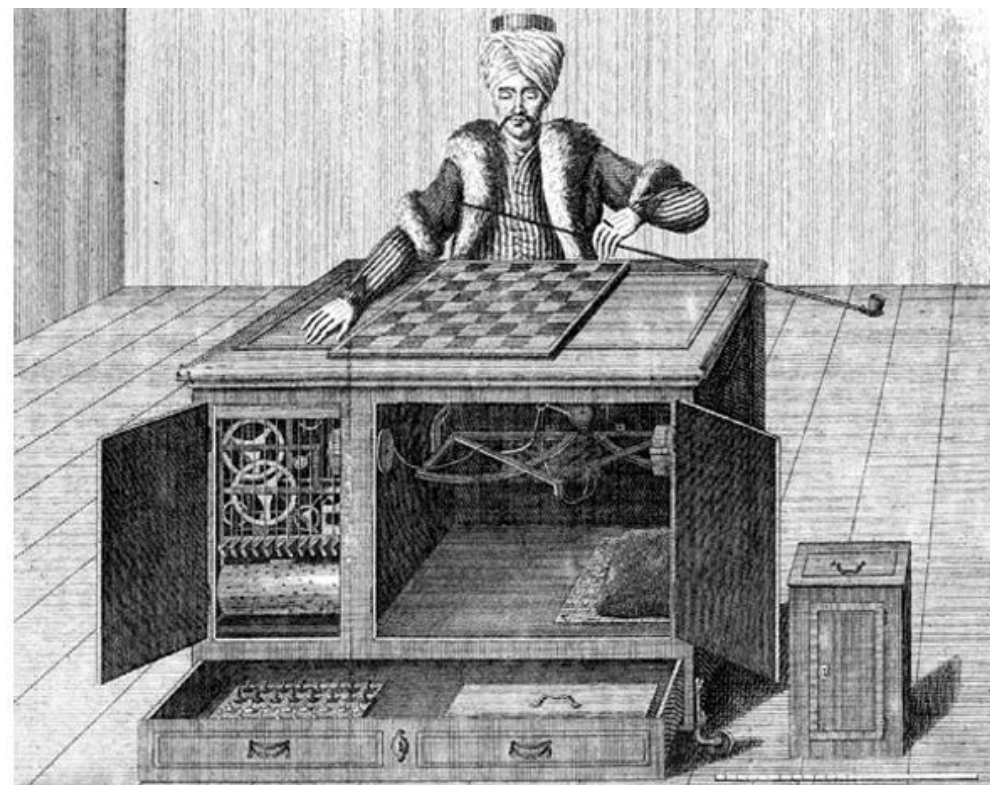
Are people happy?

Sentiment analysis

Stanford NLP library

How to find sentiment from text?

Humans are good at this but computers are not!



Supervised learning

TEXT



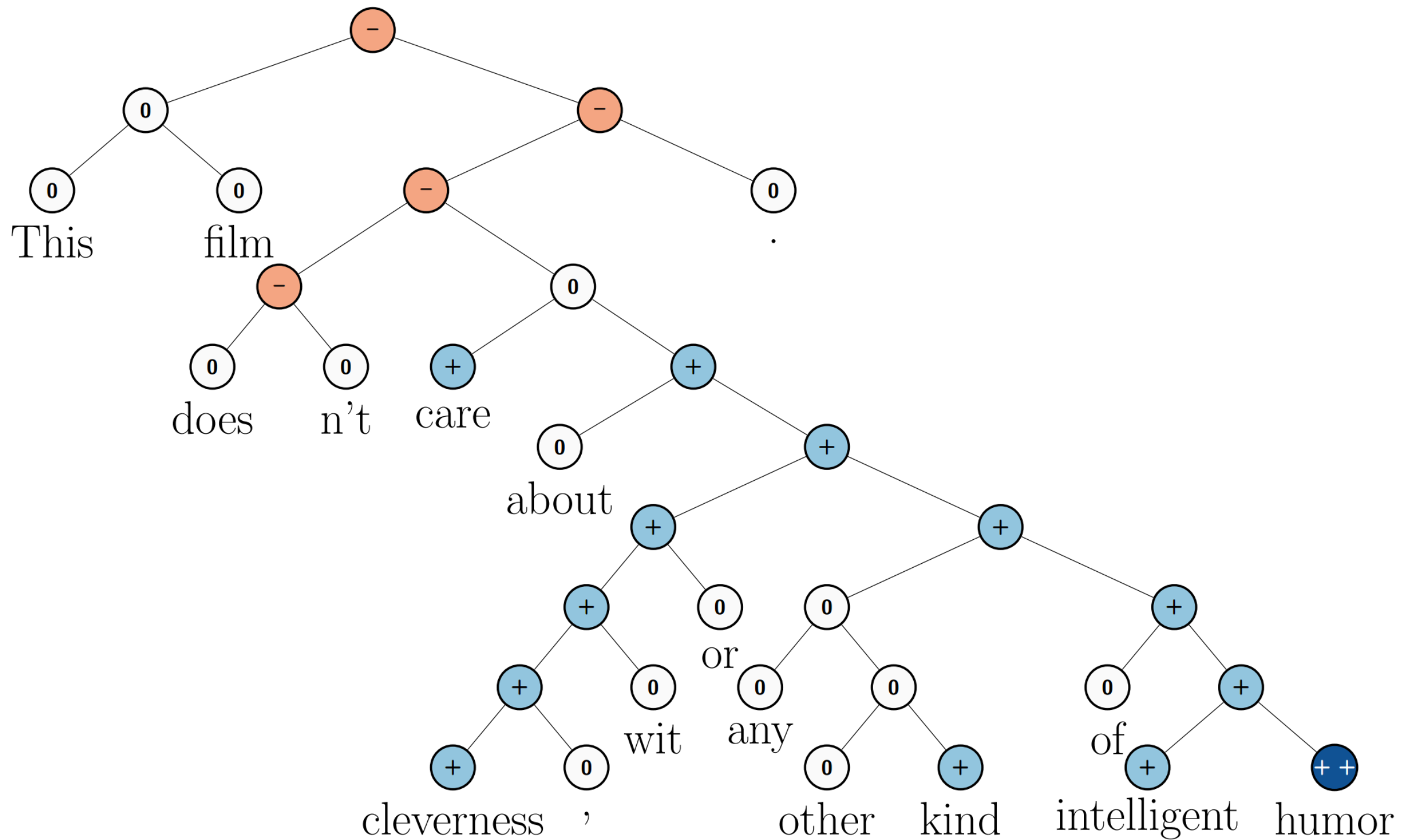
LABEL

Supervised learning

The movie was funny.

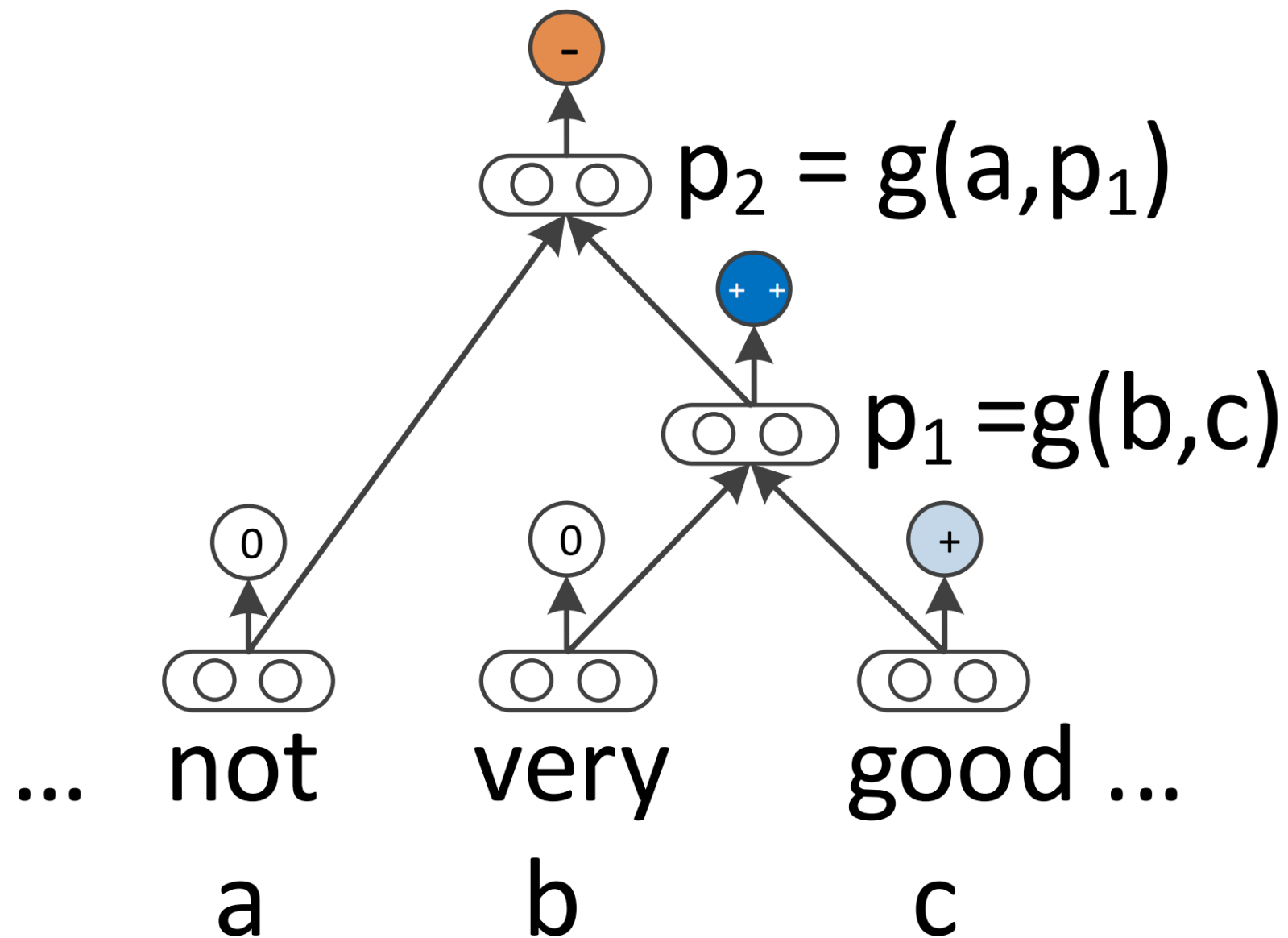
The movie was trying to be funny.





Richard Socher, Alex Perelygin, Jean Wu, Jason Chuang, Christopher Manning, Andrew Ng and Christopher Potts: Recursive Deep Models for Semantic Compositionality Over a Sentiment Treebank

Deep recurrent neural networks



#ProgNET15



SUAVE

Why F#?

- F# is great for interactive exploration of data
- Type providers for data access
- RProvider allows calling R functions
- Full programming language on the .NET platform

Thank you!

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