

Lecture Notes for **Machine Learning in Python**



Professor Eric Larson
Wide and Deep Networks Deep Dive

Logistics and Agenda

- Logistics
 - Wide/Deep due soon!
- Agenda
 - Wide/Deep Finish Demo and Town Hall
 - Basic CNN architectures and Demo

Class Overview, by topic

Table Data
Visualization

Numpy, Pandas, Seaborn
Overviews with some in-depth discussion

Dimension
Reduction and
Image Processing

Scikit-learn, Scikit Image,
Intuition only, Some mathematics

Linear and
Logistic
Regression

Numpy, Recreate API for Scikit-learn
Detailed mathematics for simple optimization
intuition for advanced optimization

Neural Networks
and Back Prop.

Numpy
Detailed mathematics for NN operations

Wide and Deep
Networks

Convolutional
Networks

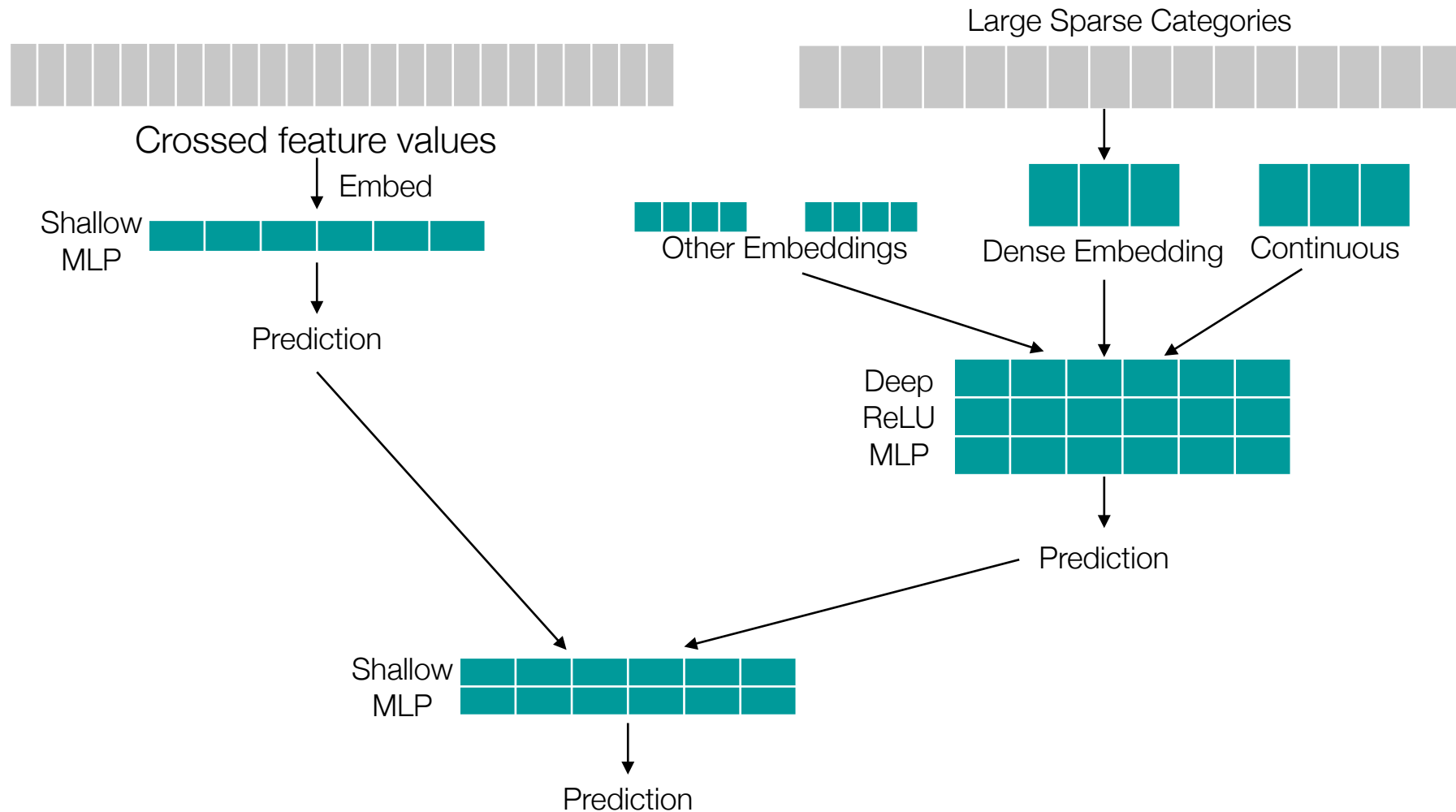
Recurrent
Networks

Keras, Tensorflow
Intuition, Detailed implement.

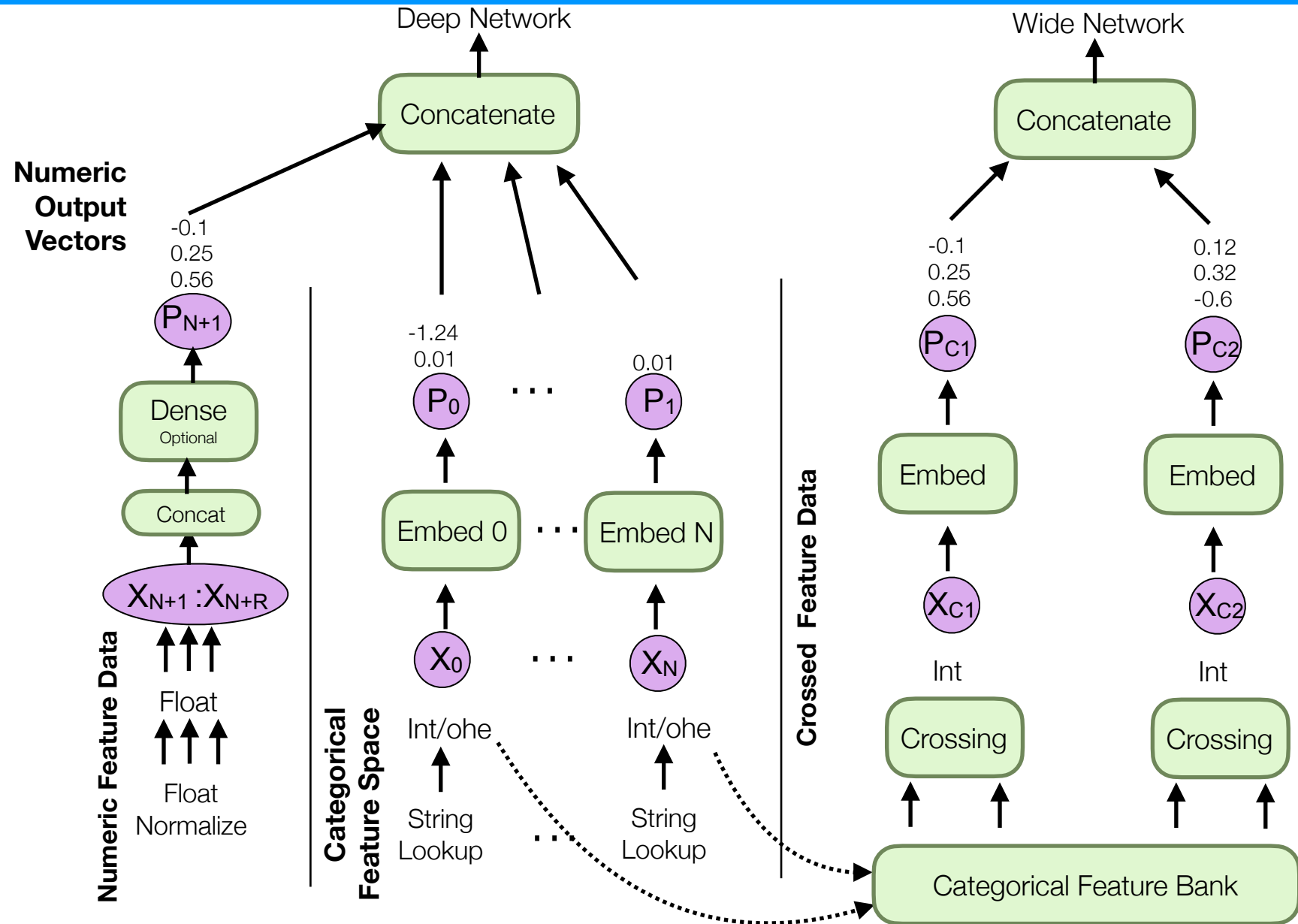
Ethics in
Language Models

ConceptNet
Case studies

Last Time:



Crossed Embeddings in Keras



Adding Wide Branches



10a. Keras Wide and Deep as TFData.ipynb

Town Hall, Wide and Deep Networks



WHEN VISITING A NEW HOUSE, IT'S
GOOD TO CHECK WHETHER THEY HAVE
AN ALWAYS-ON DEVICE TRANSMITTING
YOUR CONVERSATIONS SOMEWHERE.

Exceptional Credit

