



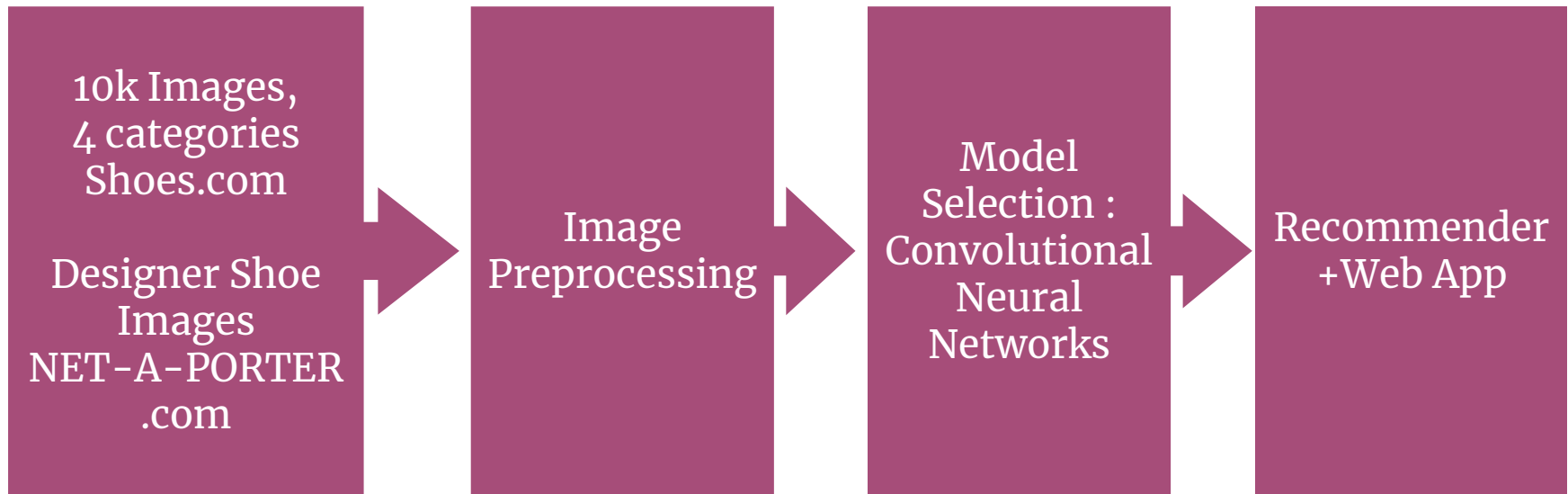
WHAT SHOE SHOULD I BUY?

-Hiranya Krishna Kumar

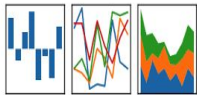
MOTIVATION

- ❖ Buy a less expensive version of a designer shoe that you like
- ❖ Replace out of stock products
- ❖ Help make recommendations to user to buy a similar product (B2C)

PIPELINE & TOOLS



pandas
 $y_{it} = \beta^T x_{it} + \mu_i + \epsilon_{it}$



scikit-image
image processing in python

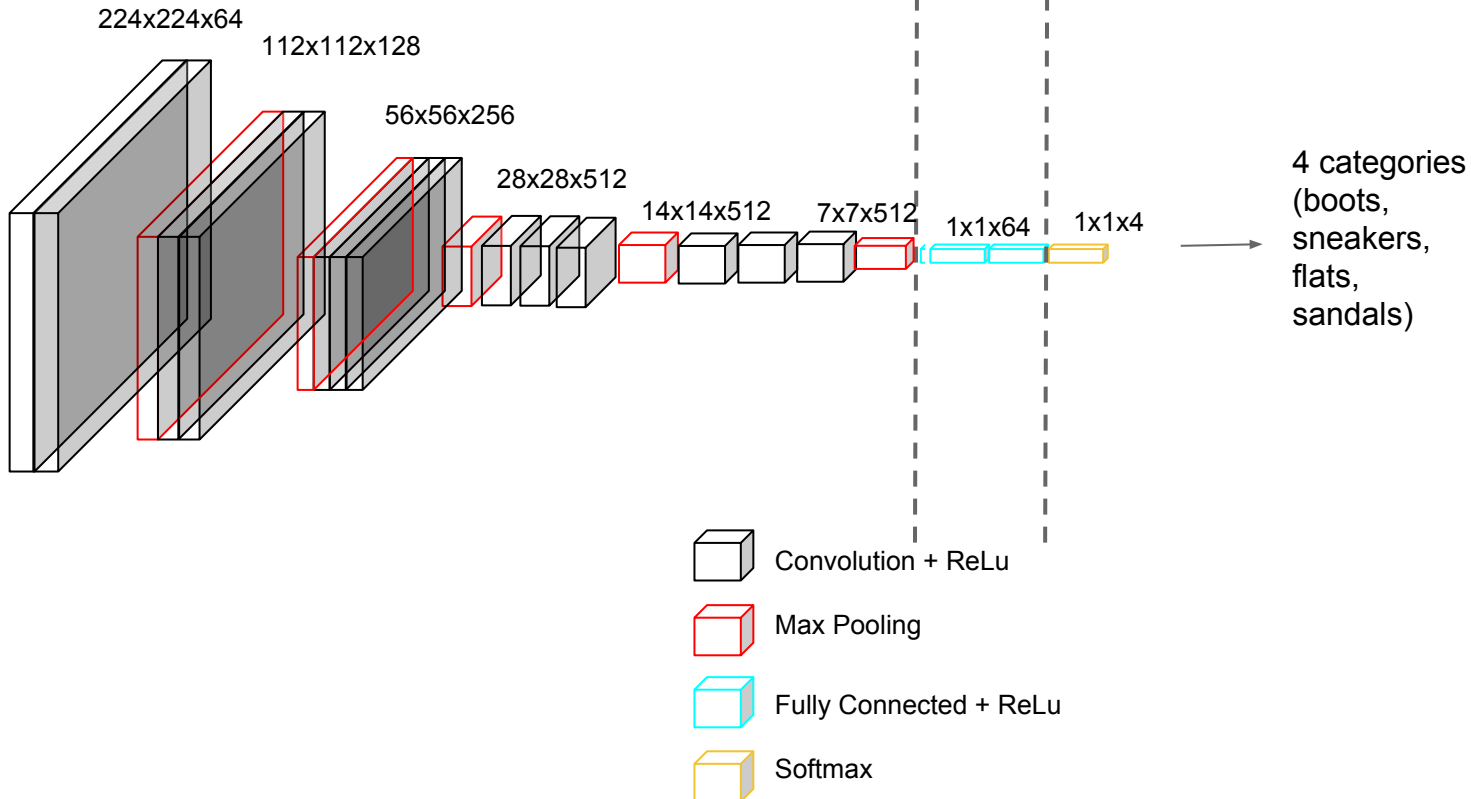


TRANSFER LEARNING USING VGG-16

Accuracy: 0.94
Majority class: 0.37

Chop off softmax and
FCN layer and freeze
weights

Extract features for
recommender



RECOMMENDER

STUART WEITZMAN-\$ 355



RECOMMENDATION1-\$ 65



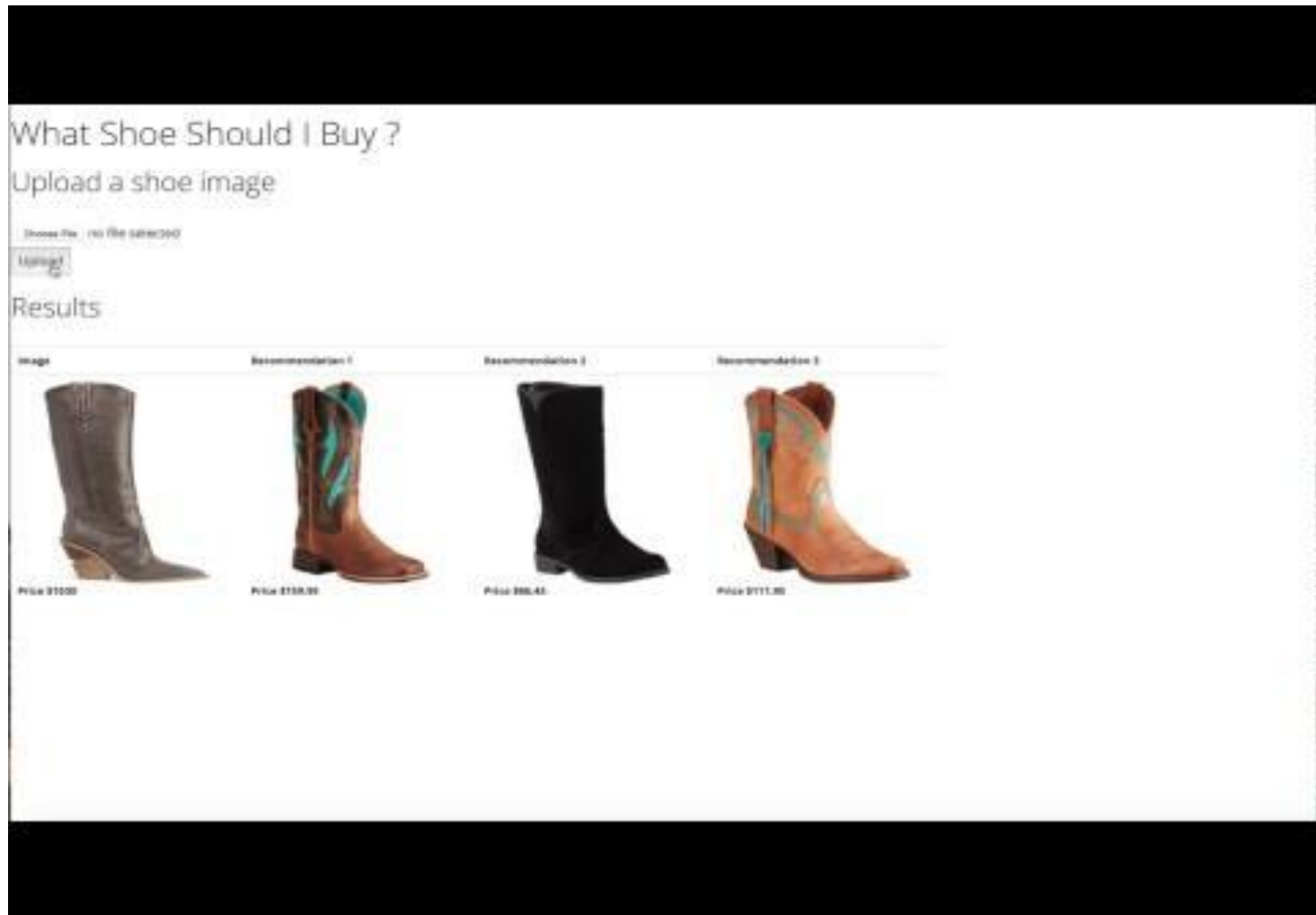
RECOMMENDATION2-\$ 80



RECOMMENDATION3-\$ 80



WEB APP



FUTURE WORK

- ❖ Add more categories and images
- ❖ Add text features (NLP)
- ❖ Use semantic segmentation to identify type of clothing/accessory/shoe

(a) Phase I: Co-Segmentation

(b) Phase II: Co-Labeling



Thanks!

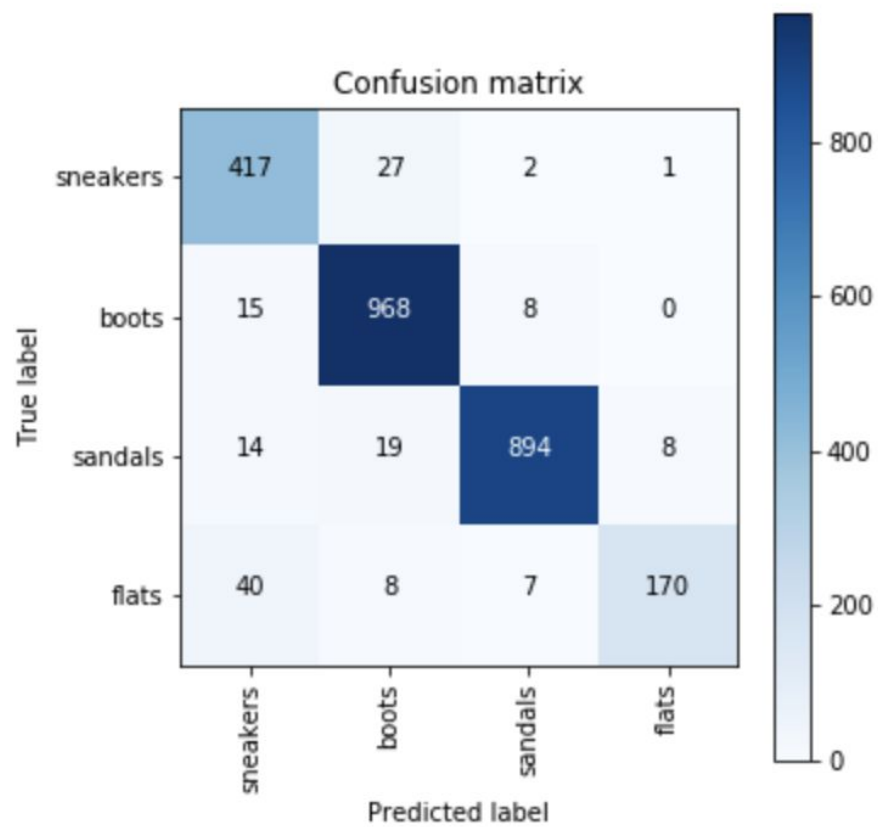
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APPENDIX



RECOMMENDER

DINAMI-\$ 230



RECOMMENDATION-1



RECOMMENDATION-2



RECOMMENDATION-3



FLASK APP

ISABEL MARANT-\$ 1030



RECOMMENDATION-2



RECOMMENDATION-1



RECOMMENDATION-3

