ANALYZING CUSTOMER FEEDBACK FOR PRODUCT FIT PREDICTION

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FIT PREDICTION AND CUSTOMER FEEDBACK

PROBLEM

- Finding the right product size is a very important problem in online fashion retail
- Product fit has been shown to be the most prevalent factor for a satisfying online fashion shopping experience
- For both items and users, the “true” size is often unknown
- Important to gather fit feedback from the customer to build recommender systems
- In some cases feedback is available as natural text

APPROACH

- Extraction of product fit feedback from customer reviews
- Traditional and very recent natural language processing techniques
- Classification of reviews whether the ordered size was a fit, or too large, or too small
- Recommender for inferring the "true" item size, and the “true” customer size is left for future work
"This skirt is beautiful and colorful and autumnal. It's just really tight on the waist! I can barely zip it up completely. Looked a bit wrinkly out of the package."
TEXT CLASSIFICATION MODELS

TEXT REPRESENTATIONS

- Bag-of-Words
- Mean Word Embeddings
- ULMFit (RNN)
- BERT (Transformer)

DATASETS

- modcloth.com
- renttherunway.com

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<th>Method</th>
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FUTURE WORK AND APPLICATIONS

FIT PREDICTION

- More fine-grained models (which part of the garment did not fit)
- Define ontology to describe product sizes (explicit size representation)
- Generalize to items and users without review texts (either using implicit or explicit size representations)

DOWNSTREAM APPLICATIONS

- Pre-selecting the recommended product size in the purchase order
- Informing customers about the fit of a specific item
- Improving search result rankings and recommendations