

How can we grow our company?

New Market Opportunity Identification Using Natural Language Processing

Understanding new markets

- ❖ Little knowledge of markets outside our core
 - Need knowledge and understanding to choose new market(s) for focus
- ❖ Gaining knowledge starts with “secondary” market research
 - Learning from “published” information
 - Sources mostly in the form of text

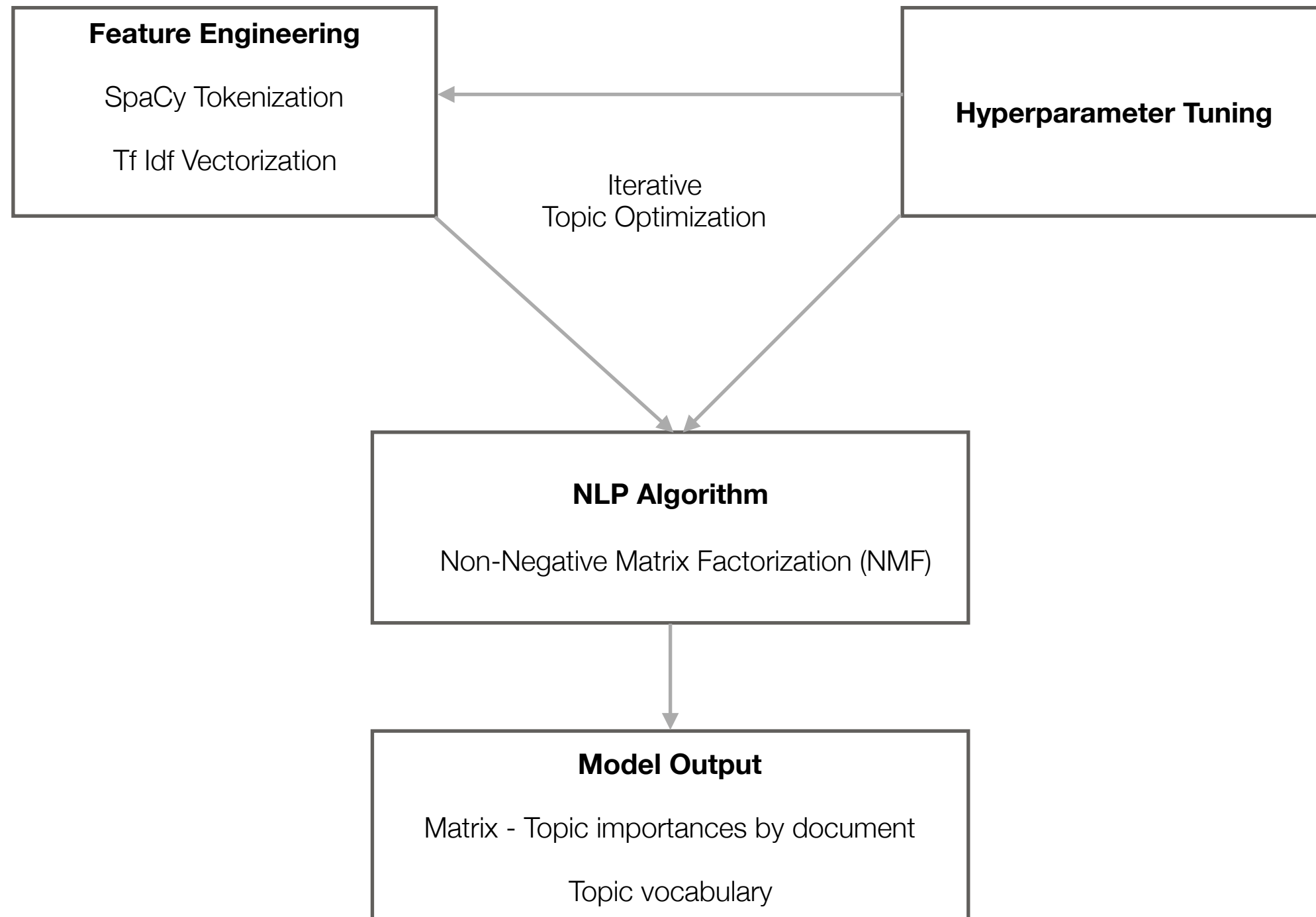
Start with domain specific text



- *Adhesives & Sealants Industry* magazine
 - ~ 600 articles, September 2013 - August 2018, scraped from the web site
 - Stored in Mongo NoSQL database

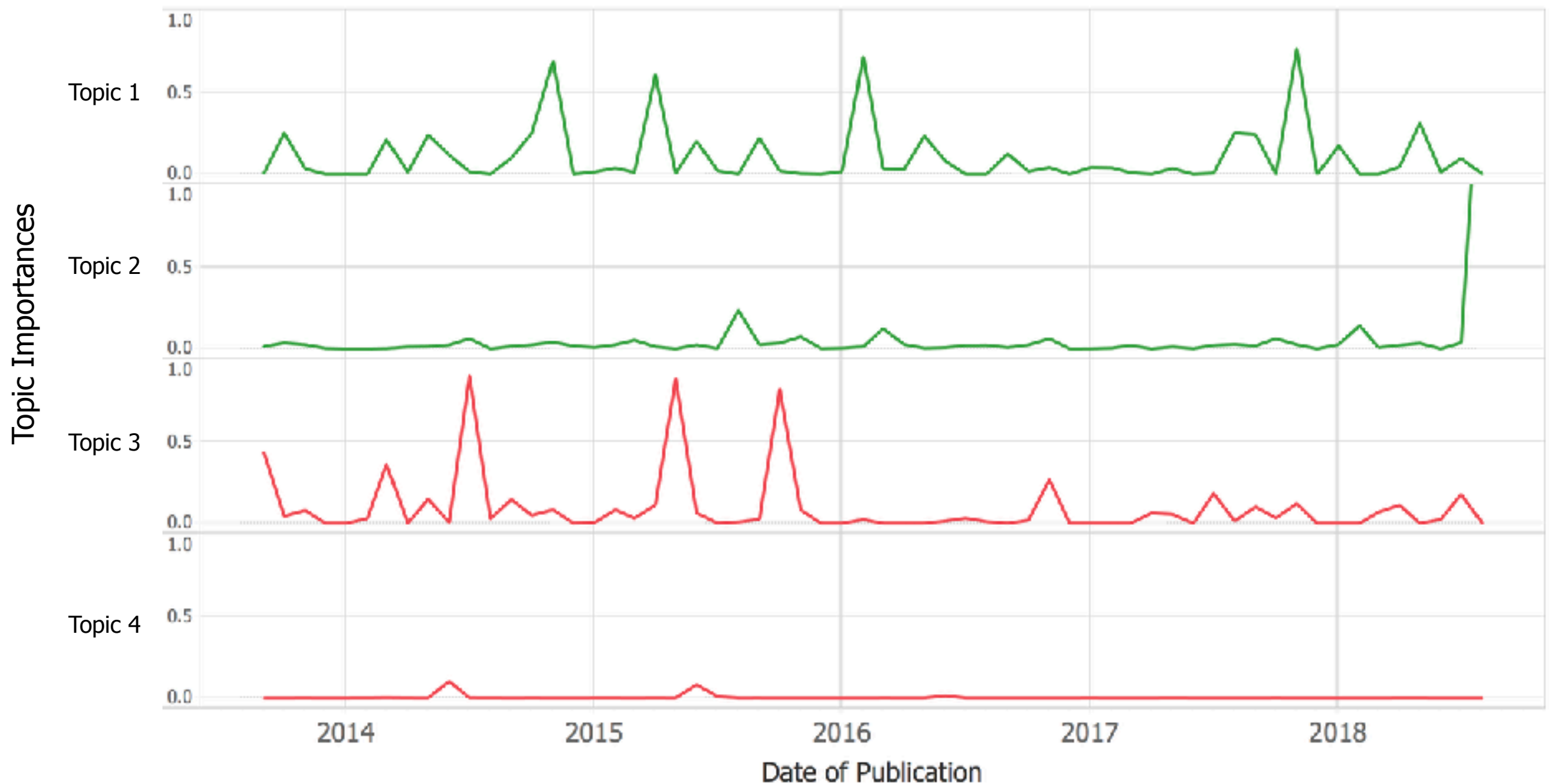
Identify topics from text

NLP Specialized Machine Learning Process



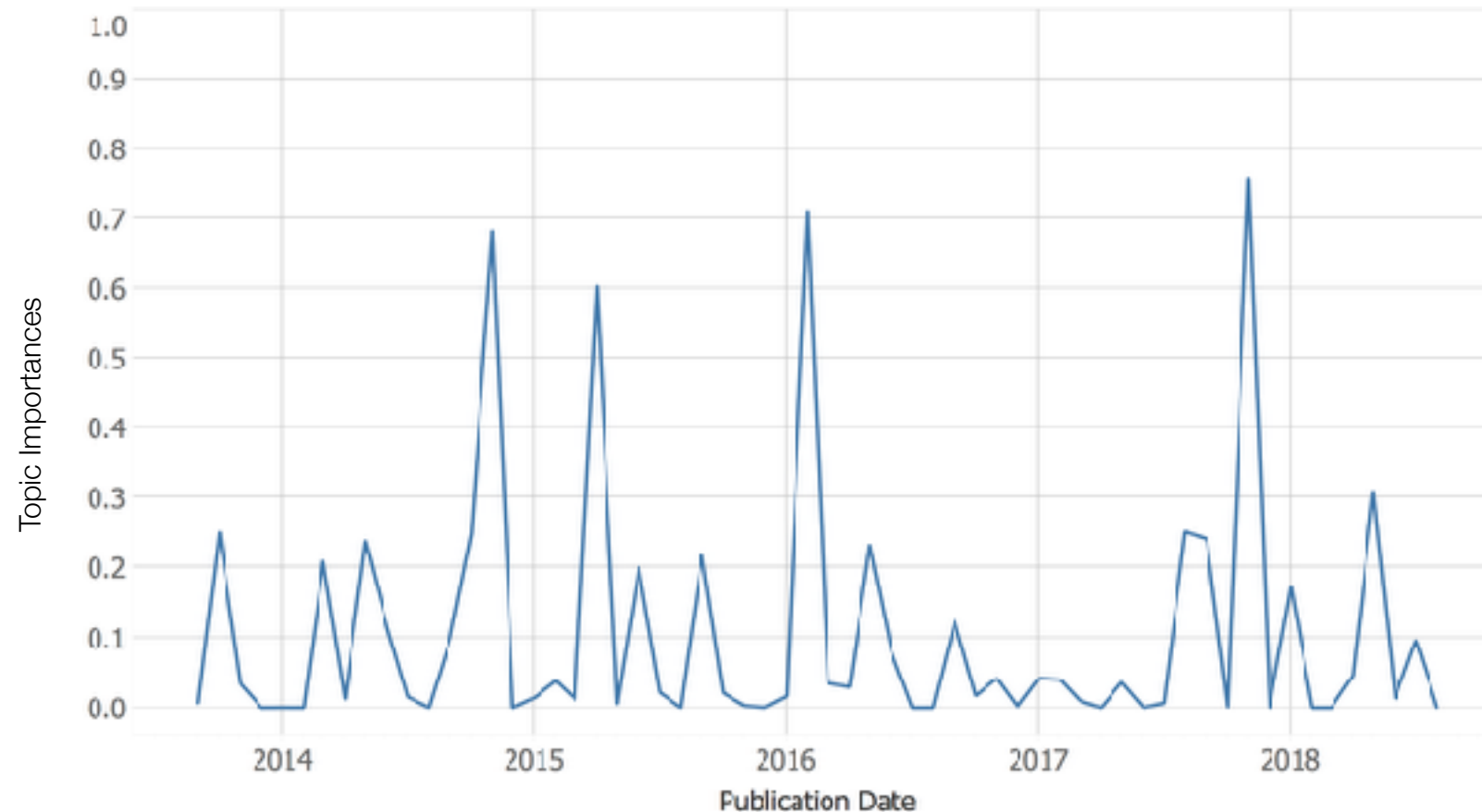
Choose Topics for Further Exploration

Plot topic importances by date of publication



Identify topic meaning

Consistently important topic



❖ Topic vocabulary from NLP model

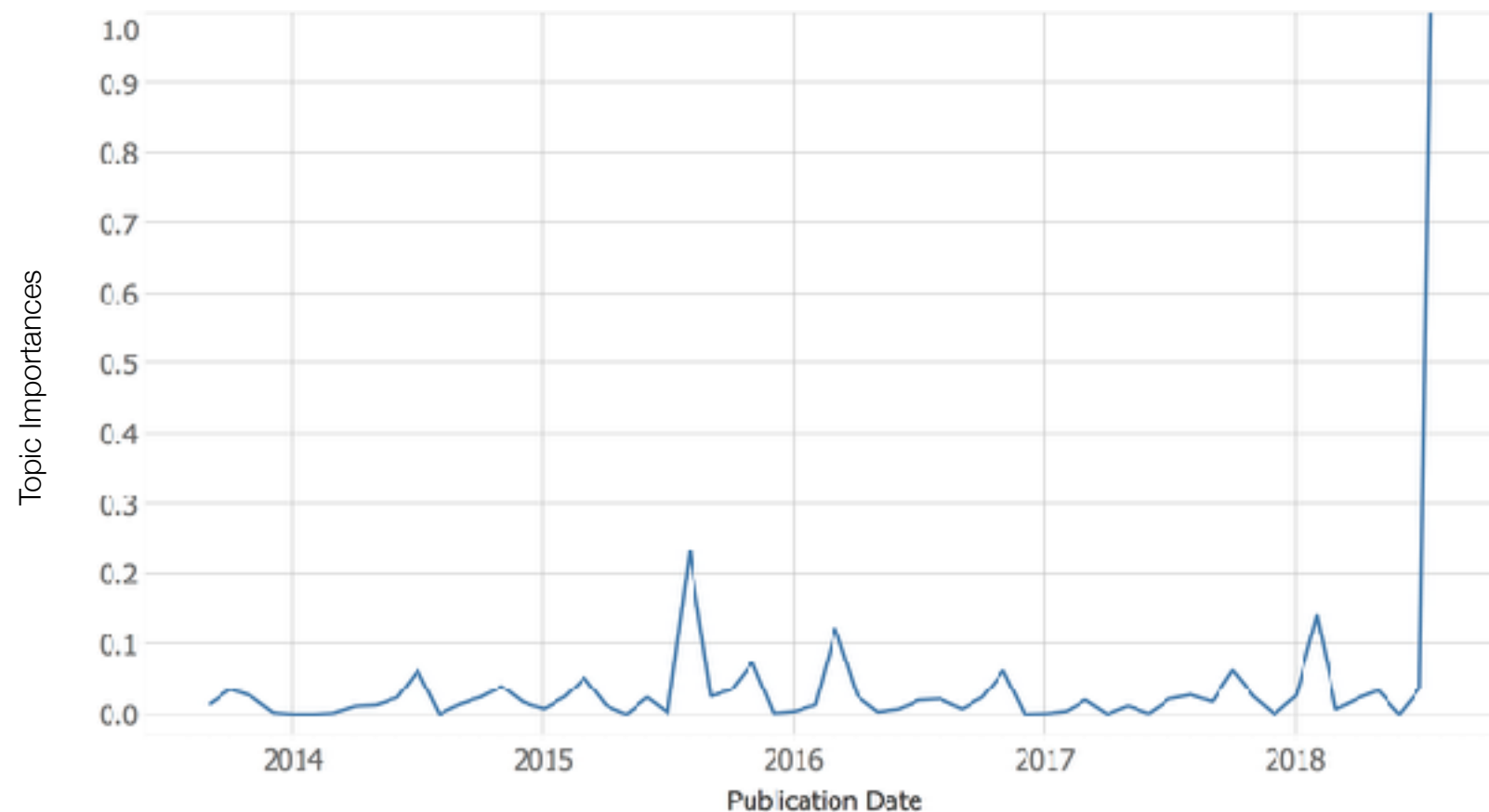
- uv, cure, light, uv light, ink, eb, intensity, vis, uv vis curing, curable

❖ Article titles

- “What technologies are involved in making adhesives that fluoresce under ultraviolet (UV) light?”
- “UV-Curable Ink Applications Increase”
- “Can we speed up curing of an UV adhesive/sealant?”
- “UV/Vis Energy-Cure Adhesives and Sealants: Industry Trends, Chemistry, and Packaging”

Identify topic meaning

Newly important topic



- ❖ Topic vocabulary from NLP model
 - sika, automotive, adhesive, frost sullivan, sullivan, frost, automotive, award, north america
- ❖ Article title
 - “Sika Automotive Receives Product Leadership Award”
- ❖ Article text subject
 - Sika Automotive receives product leadership award from Frost & Sullivan for developing adhesives to replace metal fasteners in automobiles to reduce weight.

Thank you



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