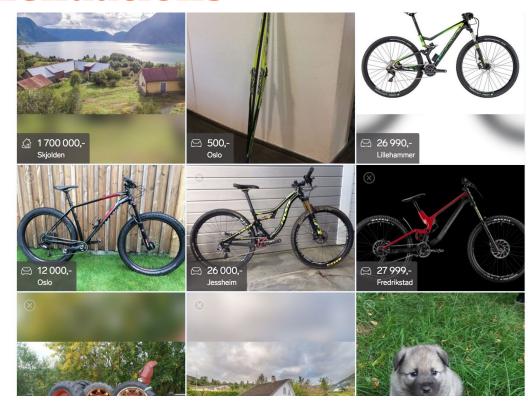


Recommendations © FINN.no

@simeneide



Recommendations





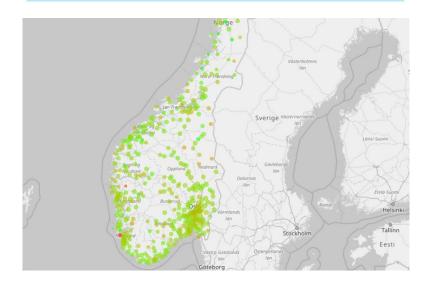
Machine learning Applications

Estimert annonseringspris for denne bilen

173600 - 202400 kr.

Vurderingen indikerer omtrentlig utropspris ved annonsering som privatperson, med forbehold om bilens tilstand og utstyrsnivå.

Se detaljert informasjon



Overskrift	jeg trenger en nettside nå!	
Sted / postnummer		
Beskrivelse av småjobben		
Type småjobb	T, data og mobil + Bilder + Tidspunkt	
Lønn for småjobben	kr totalt \$ Andre betaler fra 200 til 5,000 for lignende jobber	
	Publiser småjobben	

Iorget	
Velg katego	ori for annonsen
'guitar" tror vi p	asser best i kategorien:
Fritid, ho	bby og underholdning/Musikkinstrumenter/Gitarer
Elektroni	kk og hvitevarer/Spill og konsoll/Spill
Fritid, ho	bby og underholdning/Musikkinstrumenter/Lydutstyr



Recommend: 800'000 daily clicks

Internal



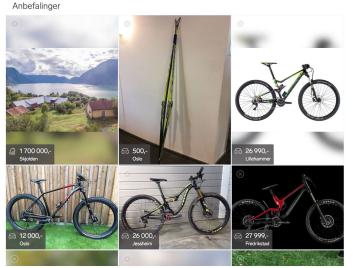












External



Oksviken - Bolig fra 2014 i flotte omgivelser - klar for innflytting - NB...





Restaurantanmeldelse: Her var det mye som skortet



Lag din egen sushi







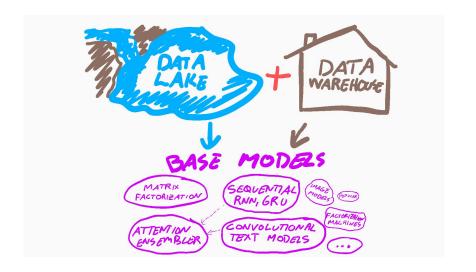








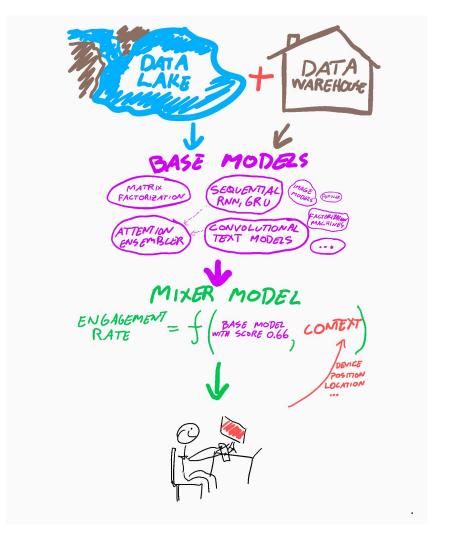
















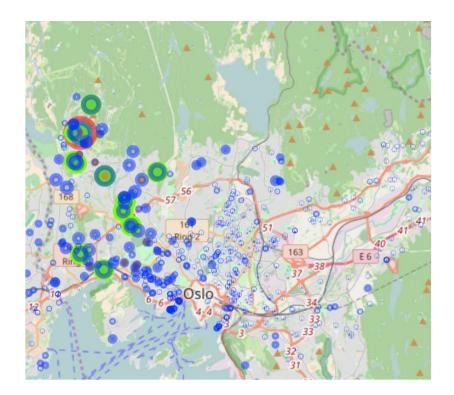


Matrix Factorization

- Based only on pageviews
- Works well out-of-box, better when tuned
- Use latent variables

Some downsides:

- Cold-start
- Alternative signals
- Little flexibility



Deep NLP Recommender

(tech.finn.no)





Taekwondo / Judo / Karate belter





EKTE SKINN sko til salg for 120kr 120,- Skjetten



Frosk Kostyme XL-XXL (130113) 479,- Nederland



leke med music 100,- Dal

Collaborative filtering recommendations

Lignende annonser



Sport - kickboksing 1000,- Asker



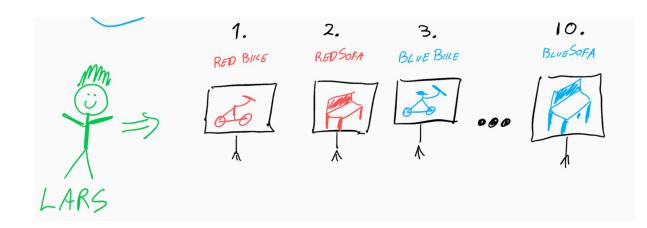
Taekwon-do drakt str. 150. med belte 249.- Røyneberg

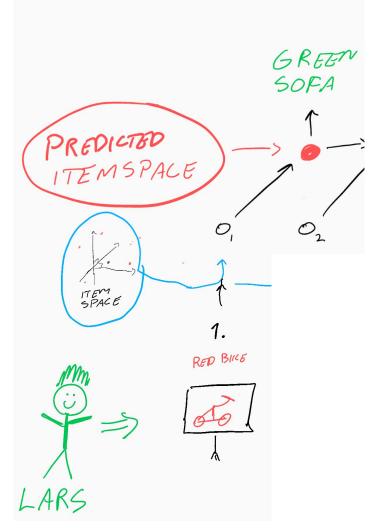


Taekwon-Do-drakter 350,- Tanem

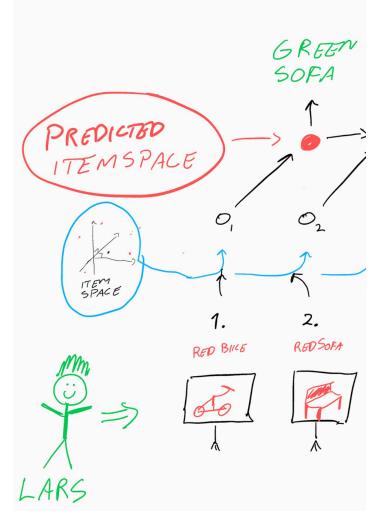
NLP Recommendations



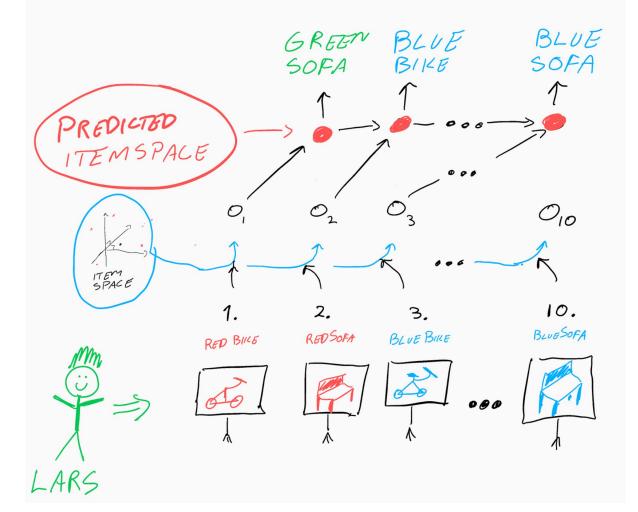




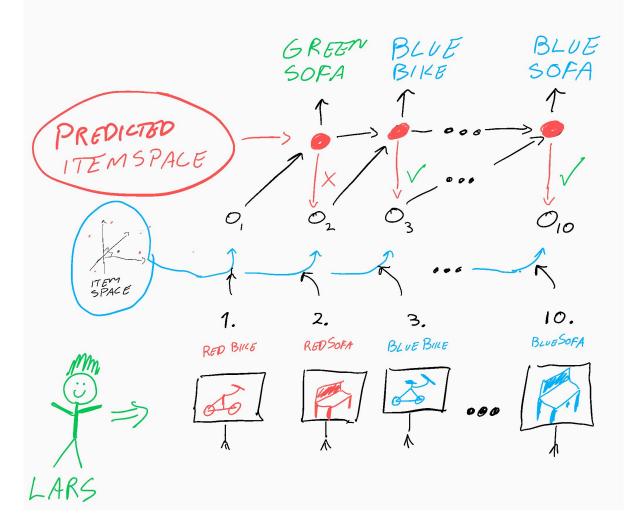








Sequential (backprop)





Test Procedure

- 1. Idea
- 2. Offline test (cheap)
- 3. Online test

Offline Test



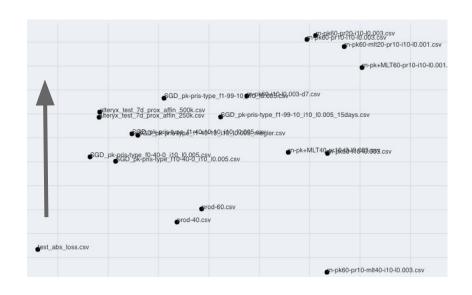
- Squared Errors are great for optimizing
- Squared Errors are terrible for relevance testing
- A metric we found with good CTR correlation:

Hitrate@6:

Recommended 6 items (not seen before).

How many is visited by the user

afterwards?



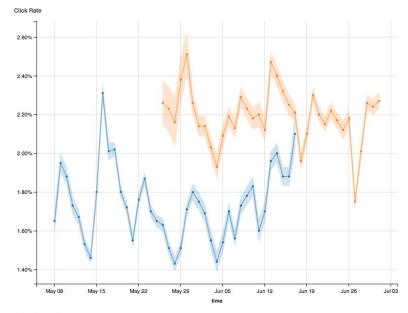
In the end... Only Online tests matter

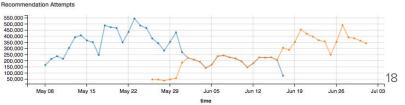


- Turn on 10% traffic on challenger
- Does it seem to work? Increase
- Turn off worst model "when it seems obvious"
- If in doubt, keep it simple

Many simplifications:

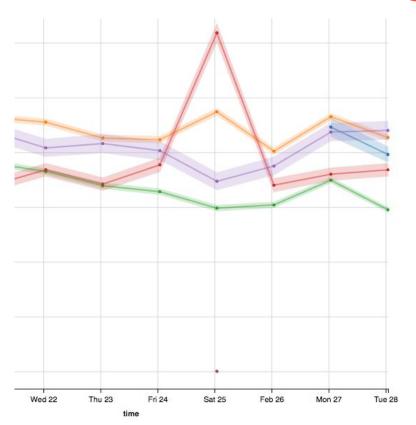
- No-sticky user
- Rest of finn is dynamic

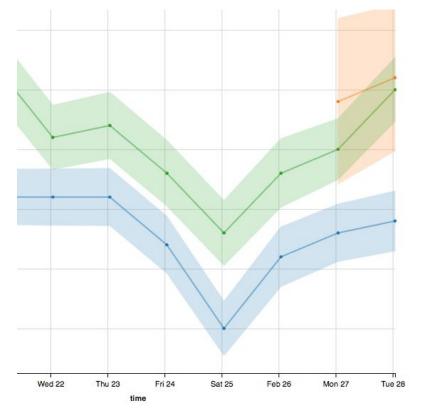






We are A/B-testing ALL THE TIME





Going forward

- Auto tune Mixer Models
- Personalized Search
- Image Search & Recommendation
- "Neural" recommended search

simeneide.github.io

Twitter: @SimenEide

