

# FashionBrain

## Research and Technology



UNIVERSITÉ DE FRIBOURG  
UNIVERSITÄT FREIBURG



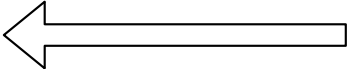
The  
University  
Of  
Sheffield.



BEUTH HOCHSCHULE FÜR TECHNIK BERLIN  
University of Applied Sciences

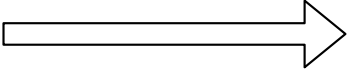


# Execution Layer



Models and Methods

# Interface Layer



Metrics and Interfaces

# Application Layer

**CT4 Scalable Methods**  
Named Entity Linking/Recognition  
Stacked Deep Learning  
  
Beuth

**CT2 Data Management**  
Database Infrastructure  
Time Series Analysis  
Machine Learning  
  
MDBS

**CT1 Semantic Integration**  
Fashion Taxonomy  
Named Entity Linking/Recognition  
  
UNIFR

**CT3 Crowdsourcing**  
Training Data  
Quality Control/Enrichment  
Social Media Analysis  
  
USFD

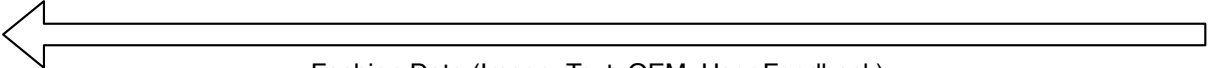
**CT5 NLP + Image**  
Textual Product Search  
NLP + Deep Learning  
Transfer Learning  
  
Zalando

**CT6 Image Recognition**  
Image Annotation/Classification  
Quality Control/Enrichment  
Data Normalization  
  
Fashwell

**CT7 Trends Prediction**  
Social Media Analysis  
Time Series Analysis  
  
UNIFR

Use Case 1 - Make Images Searchable

Use Case 2 - Fashion Trends Prediction




Fashion Data (Image, Text, OEM, User Feedback)


# Use case - Photo-based product search




SHOP THE LOOK




Ray-Ban  
149,95 €




Gipsy  
199,95 €




Lyle & Scott  
139,95 €




Shine Original  
29,95 €




DIESE LOOKS KÖNNTEN DIR AUCH GEFALLEN  
*Aktuell sind leider keine weiteren Looks verfügbar.*



Brooklyn's Own by Rocawear  
39,95 €




Won Hundred  
134,95 €



adidas Originals  
99,95 €

Das passt dazu



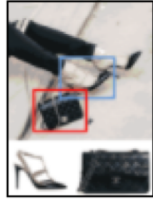
Brixton  
59,95 €

3

# Use case

## Shop the look

- Link images to products
- Recommend relevant products
- Deep learning techniques
- Crowdsourcing
- Heterogeneous sources
- Semantic Integration
- Social media analysis
- Time series analysis
- Data management



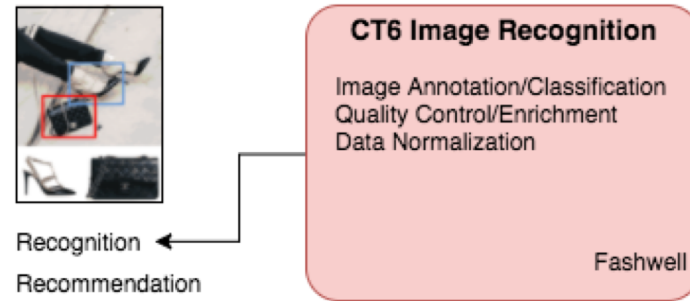
Recognition  
Recommendation



# Use case

## Shop the look

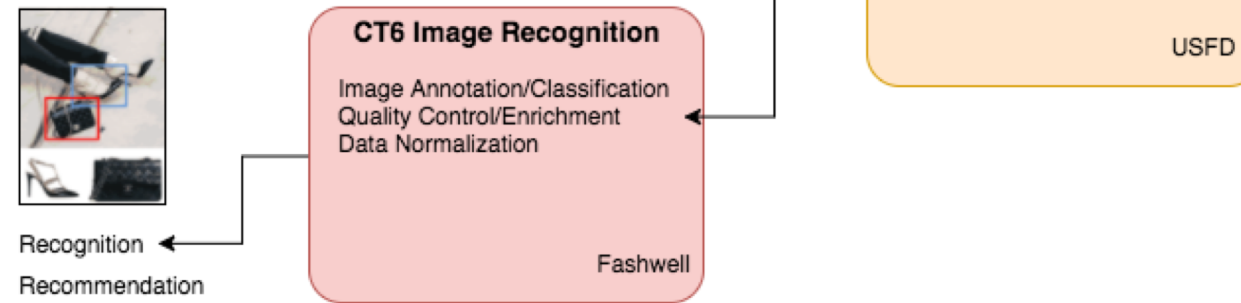
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# Use case

## Shop the look

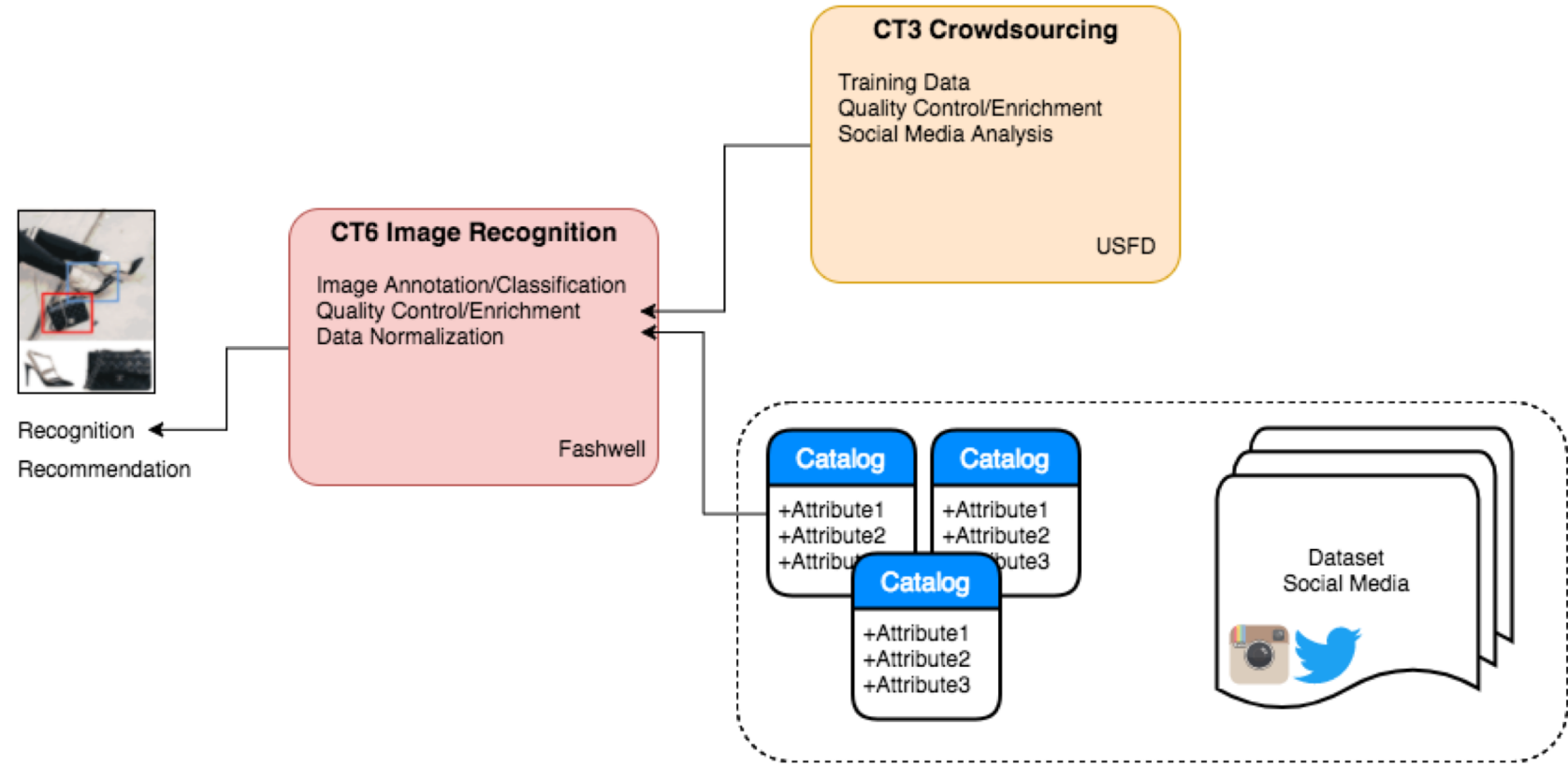
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# Use case

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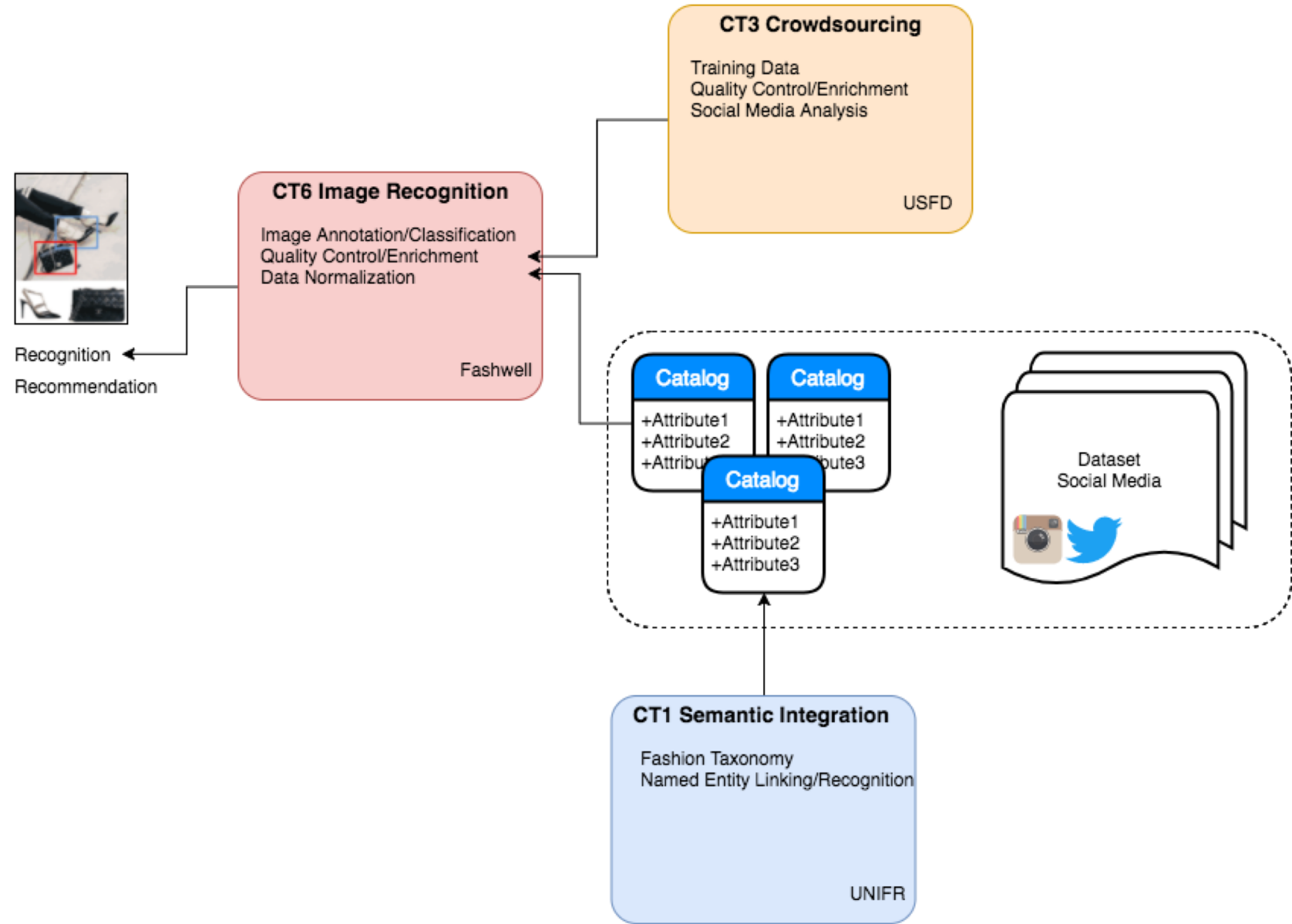
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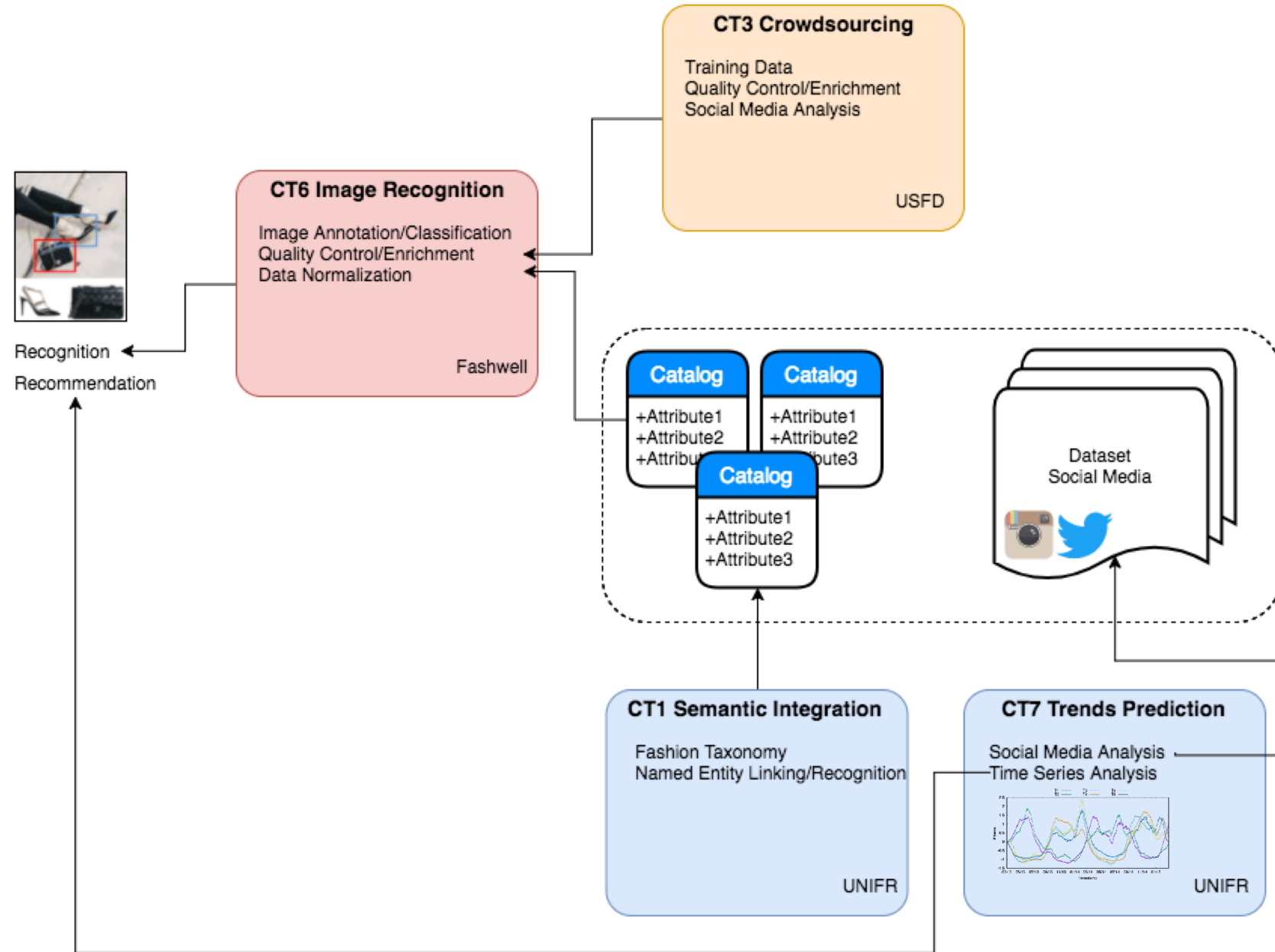
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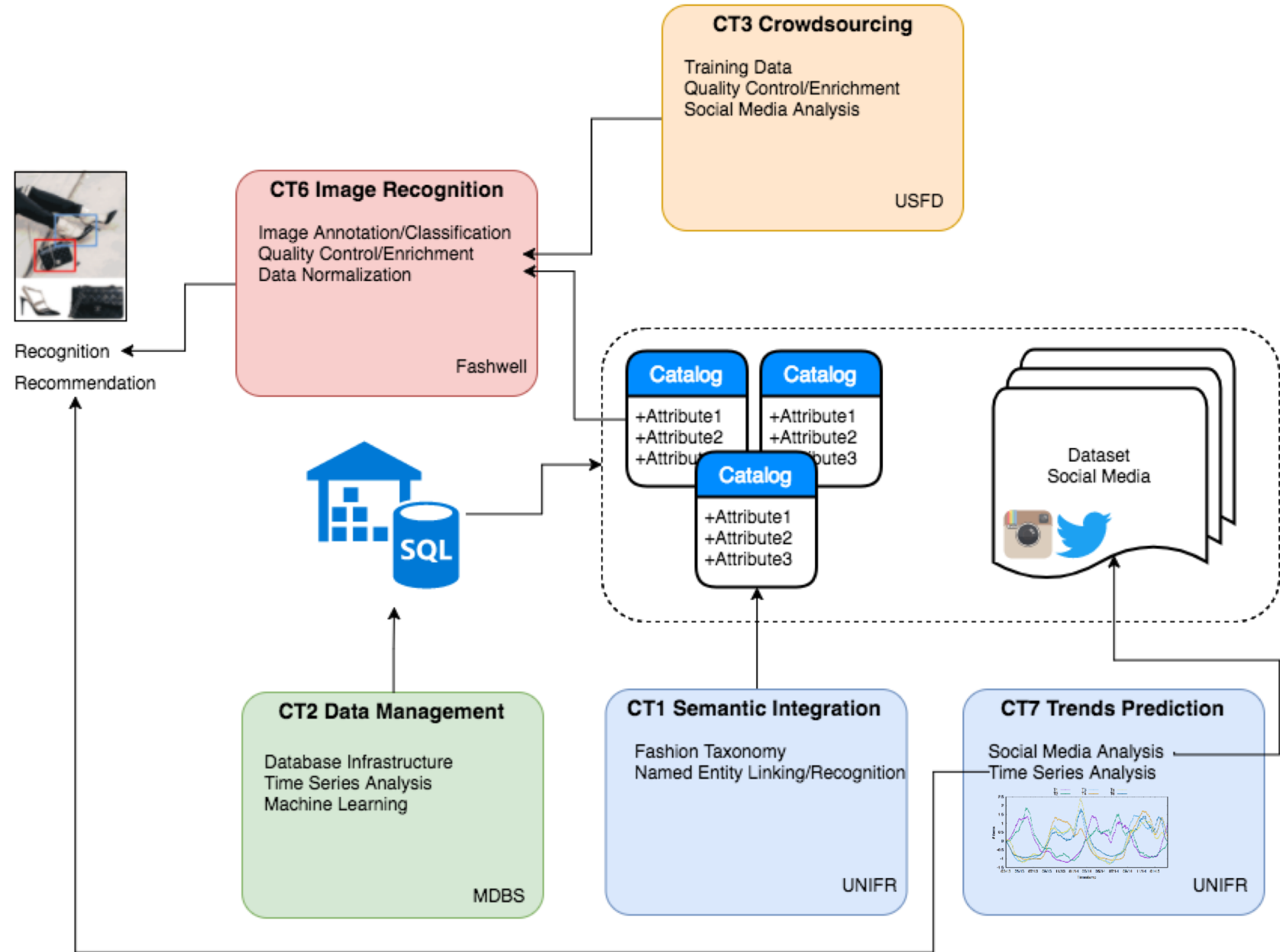
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# Use case - Make Images Searchable by Text

"I need a *hip shirt* with  
*short sleeves*."



**PULL&BEAR**  
Poloshirt - green

12,99 €



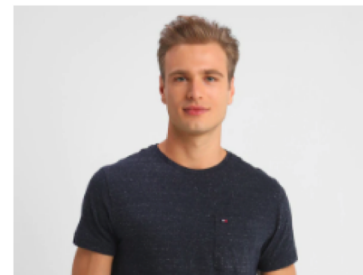
**PULL&BEAR**  
MIT V-AUSSCHNITT - T-Shirt basic -...

4,99 €



**Vans**  
ALL OVER DISTORTED - T-Shirt pri...

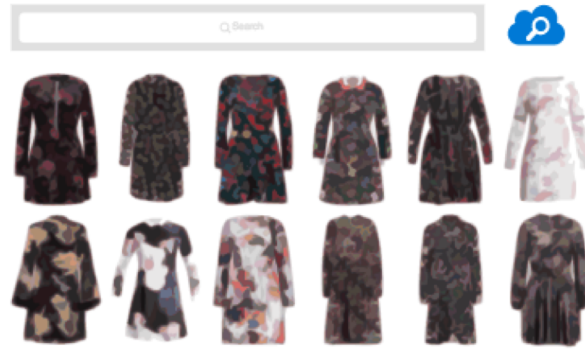
32,95 €



# Use case

## Textual Search

- Heterogeneous data
- Multiple languages
- Deep learning techniques
- Crowdsourcing
- In-database implementation



End-to-end search

Data quality

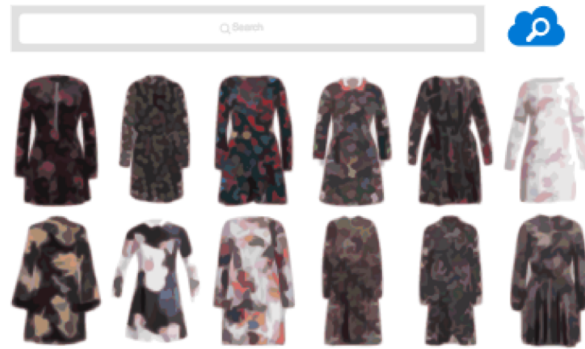
Performance



# Use case

## Textual Search

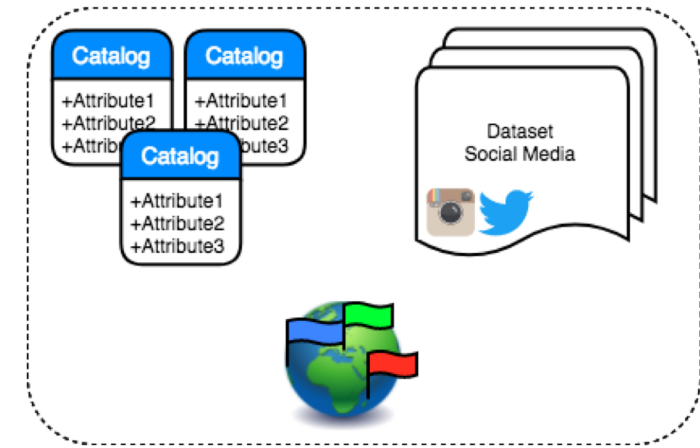
- Heterogeneous data
- Multiple languages
- Deep learning techniques
- Crowdsourcing
- In-database implementation



End-to-end search

Data quality

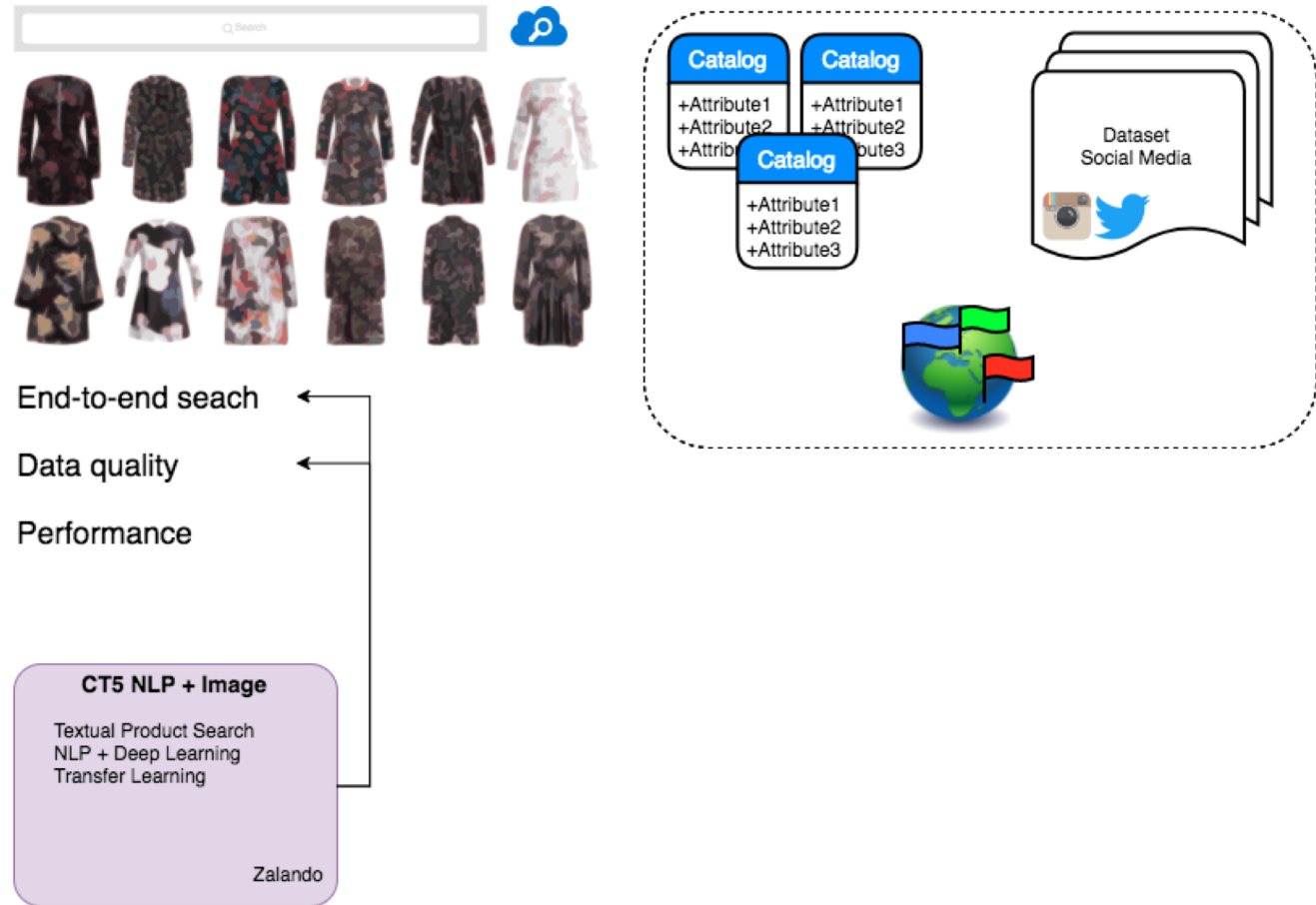
Performance



# Use case

## Textual Search

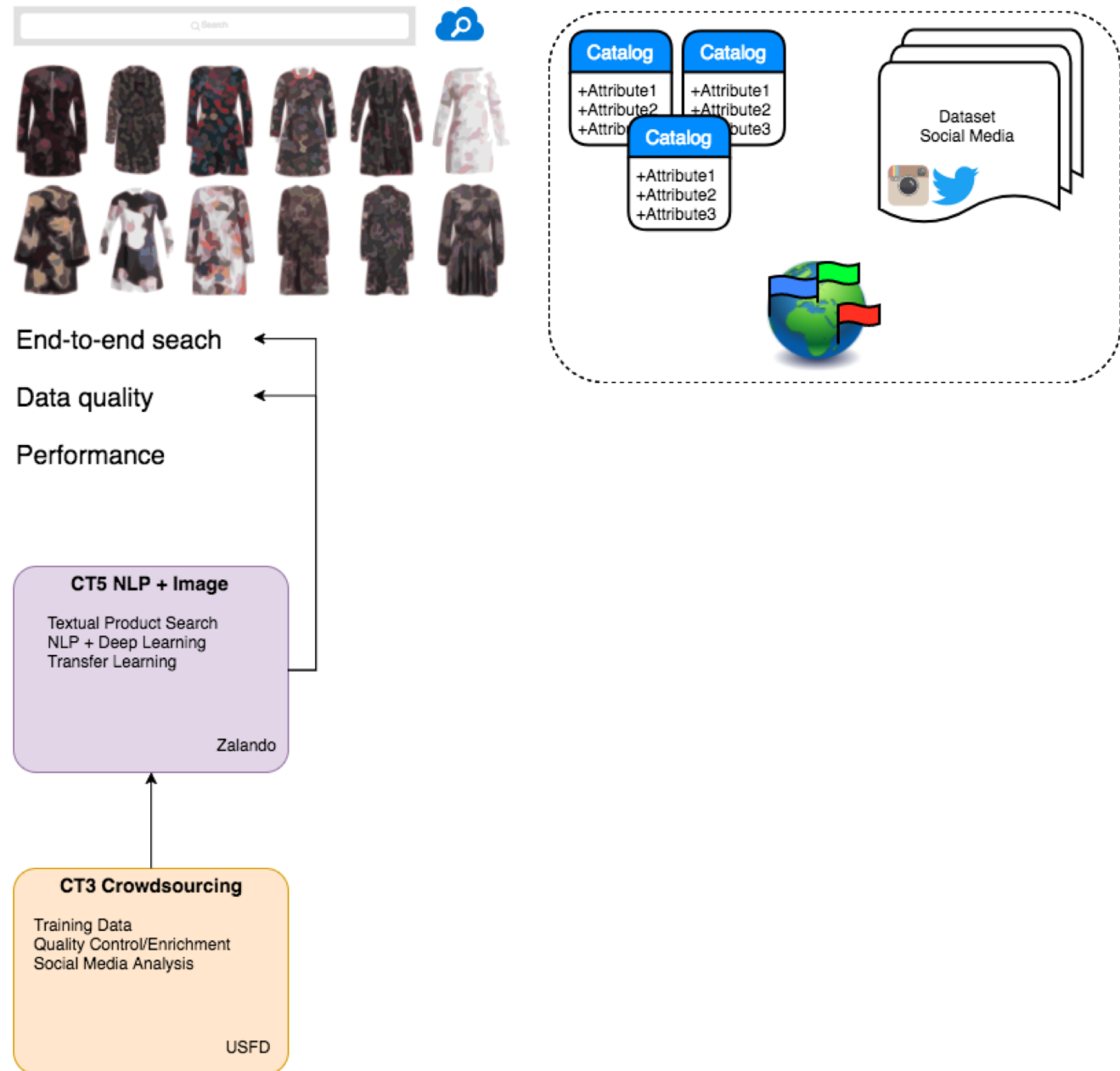
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## Textual Search

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