Historic

- March 2016 - Start of Raphael’s thesis
- Work on Allianz customer service
- March 2017 - On-going work named entities recognition and ontologies population (MIREL project)
- May 2017 - Start of HealthPredict project
Allianz customer service
Natural Language Processing

**Problem description**
Short texts on a specific field, in French

**Feature generation**
Use of extended bag-of-words representations

**Privacy / Security concerns**
No use of external API
Machine Learning

**Problem description**
Multilabel imbalanced problem
Small dataset

**Feature engineering**
Feature reduction / Feature relevance

**Supervised approach**
Bayesian optimizations: selection of best classifiers and hyperparameters
Ensemble classifiers (on-going work)
HealthPredict goals

- Preventive medicine
  - Predict hospitalization of a patient
  - Determine variables which can impact prediction results
- Health Monitoring
  - Real-time statistics
THANKS!

Any questions?

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