**Overview of some Computational Linguistics Challenges Addressed at EDF Commerce**

**Goal**
Leveraging recent advances in computational linguistics to improve the client-advisor relationship and internal processes

**Textual Data**
- Variety:
  - e-mails, tweets
  - advisor comments, satisfaction survey comments
  - client-advisor dialogues
- 5 million telephone calls
- 160,000 e-mails / month
- 42,000 tweets

**Main Features**
- French language
- "in-the-wild" data
- Lots of data. Few annotations.
- Operational constraints:
  - "Real time" processing
  - High requirements in model performance
  - Law compliance (GDPR)

**Main Tasks**
- Data annotation and quality
- Text cleaning and normalisation
- Topic discovery & identification
- Classification
- Text mining, information extraction
- Sentiment analysis and opinion mining

**Some Use Cases**
- Automation
- Monitoring and reporting
- Priorisation and routing
- Advisor assistance

**Interactive Dialogue Systems**
- System backend
- Bot managers
- Bot developers
- Logs
- User (client)

**Interactive Dialogue Systems Challenges**
- Dialogue modelling
  - choosing the right approach
  - content authoring
  - adaptation to the customer
- Dialogue log mining
  - evaluation
  - analyses and optimisation
- Dealing with an ecosystem of bots

**Contact Information**
EDF - DCO - Direction Numérique
Département IDée - Pôle TextMining
Guillaume DUBUISSON DUPLESSIS
@guillaume.dubuisson-duplessis@edf.fr
Chef de pôle : Anne-Laure Guénet