Concluding Remarks

Serena Villata

Université Côte d’Azur, CNRS, Inria, I3S, France
villata@i3s.unice.fr
Perspectives

• Analogy with opinion mining:
  - understanding what people think about something VS understanding why (Habernal et al. (2014))

• Going beyond critical thinking, i.e., a set of rational, deductive arguments:
  - How to influence a real audience?
  - What is the role of emotions?
  - How to analyse human reasoning processes?
  - ...

Perspectives

• Analogy with opinion mining:
  ■ understanding *what* people think about something VS
    understanding *why* (Habernal et al. (2014))

• Going beyond *critical thinking*, i.e., a set of rational, deductive arguments:
  ■ How to influence a real audience?
  ■ What is the role of emotions?
  ■ How to analyse human reasoning processes?
  ■ . . .
Perspectives

- **Big data:**
  - social network posts, forums, blogs, product reviews, user comments to newspapers articles, etc.
  - crowd-sourcing assessment to annotate very large corpora despite the difficulty of the task

- **Deep learning:**
  - fast and efficient machine learning algorithms
  - large and unsupervised corpora
  - e.g., word embeddings: automatically learned feature spaces encoding high-level, rich linguistic similarity between terms
Perspectives

• **Big data:**
  - social network posts, forums, blogs, product reviews, user comments to newspapers articles, etc.
  - crowd-sourcing assessment to annotate very large corpora despite the difficulty of the task

• **Deep learning:**
  - fast and efficient machine learning algorithms
  - large and unsupervised corpora
  - e.g., word embeddings: automatically learned feature spaces encoding high-level, rich linguistic similarity between terms
Perspectives

• **Multilingualism:**
  - argument mining mainly for *English* texts, one approach for *Greek* texts
  - What about the other languages?
  - Are there language-specific argumentation patterns that can be identified?

• **Other issues:**
  - argument mining for the automated evaluation of alternative design solutions
  - uncertainty measure based on natural language arguments
  - meaningful visual representation of the results to support decision making
  - ...
Perspectives

• **Multilingualism:**
  - argument mining mainly for *english* texts, one approach for *greek* texts
  - What about the other languages?
  - Are there language-specific argumentation patterns that can be identified?

• **Other issues:**
  - argument mining for the automated evaluation of alternative design solutions
  - uncertainty measure based on natural language arguments
  - meaningful visual representation of the results to support decision making
  - . . .
Take home message: argument mining pipeline

1. Select a precise task and write down clear annotation guidelines
3. Choose or define the best solution for your task (sentence classification, structure prediction, . . .)
4. Evaluate your performances and compare with related work
Useful references

- Corpus repositories:
  - http://corpora.aifdb.org/
  - http://argumentationmining.disi.unibo.it/resources.html

- Past events:
  - Proceedings of the Argument Mining Workshop Series
  - Proceedings of the Workshop on Frontiers and Connections between Argumentation Theory and Natural Language Processing
Useful references

- Corpus repositories:
  - http://corpora.aifdb.org/
  - http://argumentationmining.disi.unibo.it/resources.html

- Past events:
  - Proceedings of the Argument Mining Workshop Series
  - Proceedings of the Workshop on Frontiers and Connections between Argumentation Theory and Natural Language Processing
Thanks for your participation to the tutorial!