

# Argument Mining: Was Ist Das?

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# Intro: Argument Mining

- Popular: Meetings, Workshops, Papers, Special Issues?
- Definitely important but potentially buzz-wordy....
- Unclear exactly what argument mining is (or is not)
- Worth discussing
- CMNA seems as good a place as any :D

# From Data to Argument

- [ Lots of data (Web, Google Books, Social Media)
- [ Data is useful
- [ Analysed/Structured/Targeted Corpora very useful
- [ Mining gets us from raw data to useful data

# 3 Approaches

— [ Argument Mining '*Simpliciter*'

— [ Argument Mining by Analogy

— [ Argument Mining as Social Process

# Simpliciter

- [ Exploiting existing & developing new techniques from Machine Learning & Natural Language Processing

- [ Is there more?

- The core of recent existing work fits here

- But there are also other approaches....

# By Analogy

— [ Argument mining is to arguments as Data mining is to data?

— [ What about Data Science (generalisable extraction of knowledge from data)

— Is argument mining merely a form of data mining with a keen focus on argument?

— Chance Discovery | Static & Dynamic | Tools/Workflows  
| Sharing

# Social Dimensions

— [ Increasing argumentative structure in existing resources

— [ Creating new well-structured resources (either to immediately answer questions or be 'good input' to deeper techniques)

— [ Reinterpreting existing tools in light of Argumentation Mining

— [ [1] Argument Wall, [2] Online Dialogue Games  
(MagtALO, ArguBlogging, &c.)

# Conclusions

— [ Is it just:

— Data (in) ==> Argument Information & Meta-Data (out)

— [ regardless of the process (explicit, deliberative, goal-oriented) that mines the arguments?

— Potentially a lot of overlap with activities that were previously just argumentation, e.g.

— Social Dimensions

— Analysis Tools



# Future Work/Questions

— [ We have a chat....

# References

— [ **Reed, C. & Wells, S. (2007) “Dialogical Argument as an interface to complex debates” IEEE Intelligent Systems vol. 22 (6) pp. 60-65**

— [ **Wells, S. (2012) “A Domain Specific Language for Describing Diverse Systems of Dialogue” in Journal of Applied Logic vol. 10 (4), pp. 309-329.**

— [ **Wells, S. & Reed, C. (2009) “Argument Blogging” in Proceedings of the 9th International Workshop on Computational Models of Natural Argument (CMNA9)**