

# Outline

## Part 3: Existing Resources and Benchmark Data

### 3.1 Existing Corpora

### 3.2 Debate Portals and Community Platforms

# Debate Portals and Community Platforms – Overview

Slides by Henning Wachsmuth and Benno Stein

## Debate portals and more

- The web as a corpus
- Relevant web resources
- Leveraging iDebate

## Community platforms

- Towards a web of arguments
- Existing community platforms
- The Argument Web

# The Web as a Corpus of Argumentation

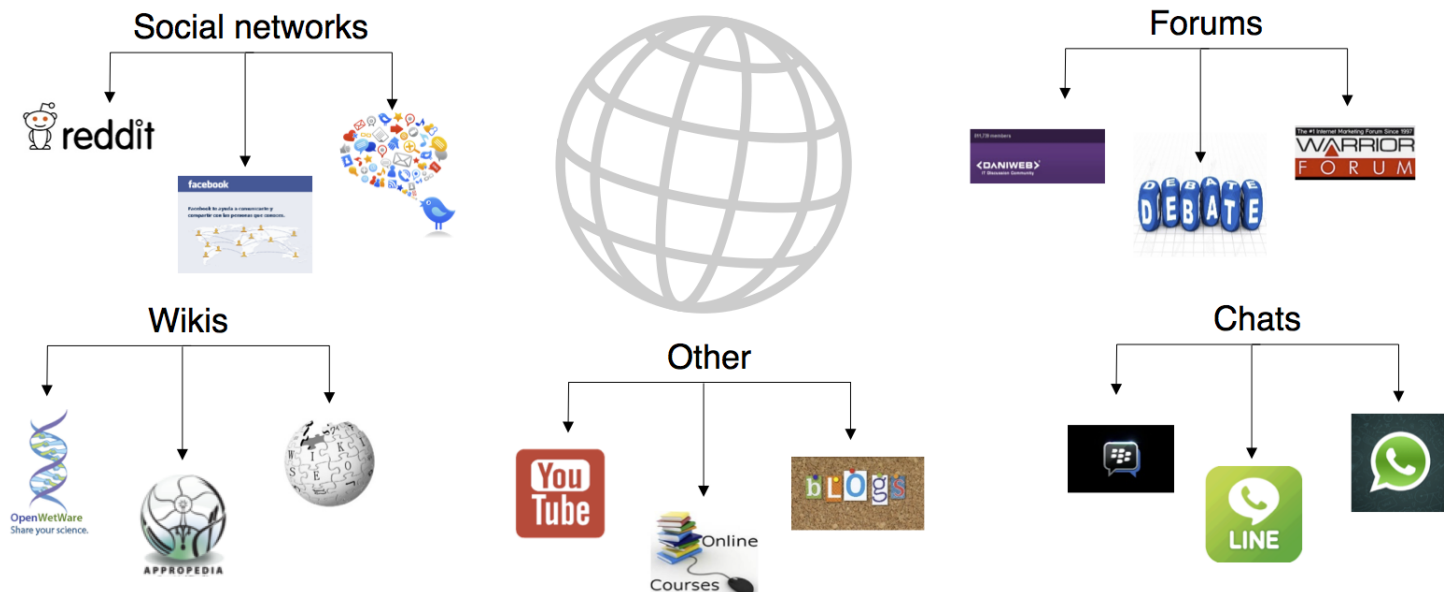
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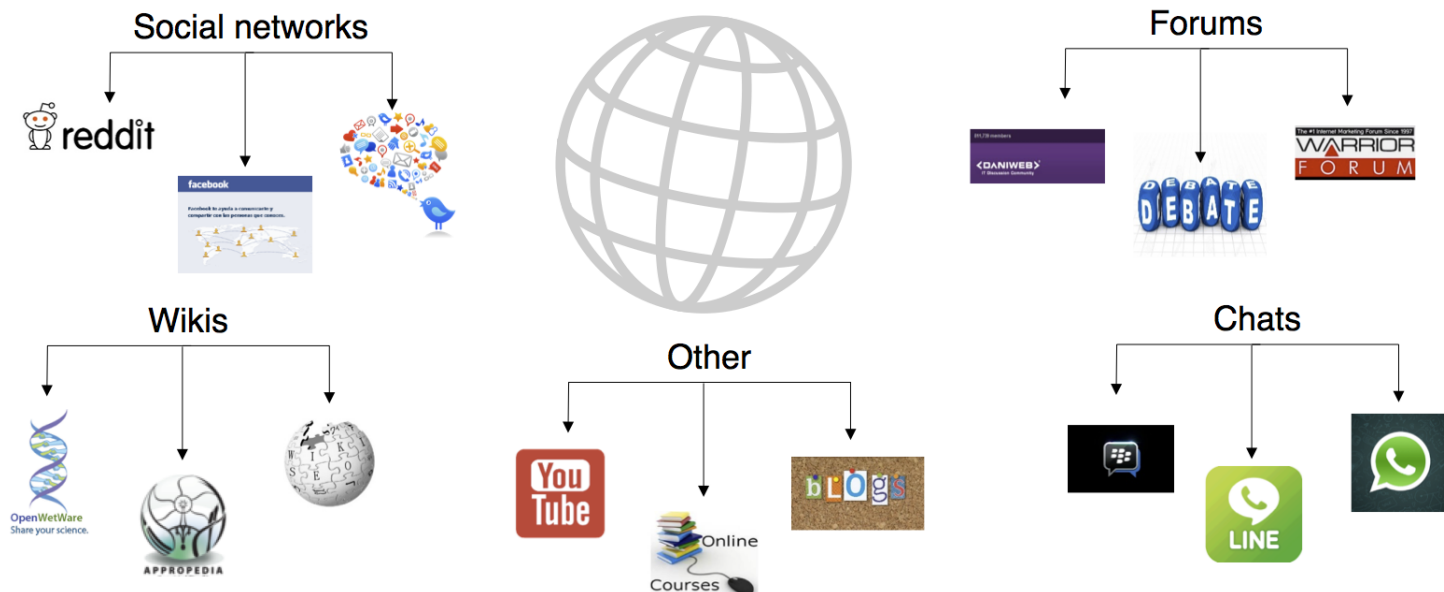
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## Ground-truth labels can be acquired automatically from the web

- Controversial topics
- Argument units and relations
- Argumentative texts
- Quality assessments

# Overview of Relevant Web Resources

## Several debate platforms on the web

- Some give references for arguments: [debatepedia.org](http://debatepedia.org)
- Some score the current debate state: [createdebate.com](http://createdebate.com), [forandagainst.com](http://forandagainst.com)



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## Other accessible web resources relevant for argumentation

- Reddit generally has controversy labels (Anifowose 2016)
- Subreddit “change my view” has persuasiveness labels (Tan et al. 2016)
- [Wikipedia talk pages](#) have support and oppose labels
- ...

# Leveraging iDebate with Distant Supervision

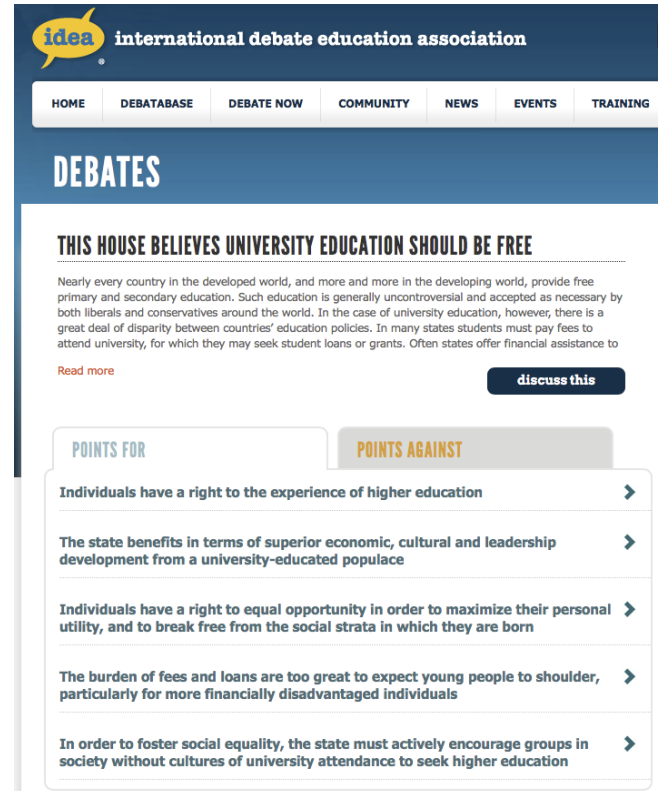
## Deatabase at [www.idebate.org](http://www.idebate.org)

- 1k+ discussions on controversies
- Discussion: Introduction, up to 6 pro and 6 con points with counterpoints
- 14 themes: Politics, education, ...

## Corpus creation with distant supervision

(Al-Khatib et al. 2016)

- Introductory sentences mapped to class “non-argumentative”
- Each (counter-) point: “argumentative”
- Premise/conclusion mapping tested but turned out complex



The screenshot shows the iDebate website interface. At the top is the header with the 'idea' logo and the text 'international debate education association'. Below the header is a navigation bar with links: HOME, DEBATABASE, DEBATE NOW, COMMUNITY, NEWS, EVENTS, and TRAINING. The main section is titled 'DEBATES'. The current debate topic is 'THIS HOUSE BELIEVES UNIVERSITY EDUCATION SHOULD BE FREE'. Below the topic is a paragraph of text: 'Nearly every country in the developed world, and more and more in the developing world, provide free primary and secondary education. Such education is generally uncontroversial and accepted as necessary by both liberals and conservatives around the world. In the case of university education, however, there is a great deal of disparity between countries' education policies. In many states students must pay fees to attend university, for which they may seek student loans or grants. Often states offer financial assistance to'. There are links for 'Read more' and 'discuss this'. Below the text are two sections: 'POINTS FOR' and 'POINTS AGAINST'. The 'POINTS FOR' section contains five points, each with a right arrow: 'Individuals have a right to the experience of higher education', 'The state benefits in terms of superior economic, cultural and leadership development from a university-educated populace', 'Individuals have a right to equal opportunity in order to maximize their personal utility, and to break free from the social strata in which they are born', 'The burden of fees and loans are too great to expect young people to shoulder, particularly for more financially disadvantaged individuals', and 'In order to foster social equality, the state must actively encourage groups in society without cultures of university attendance to seek higher education'.



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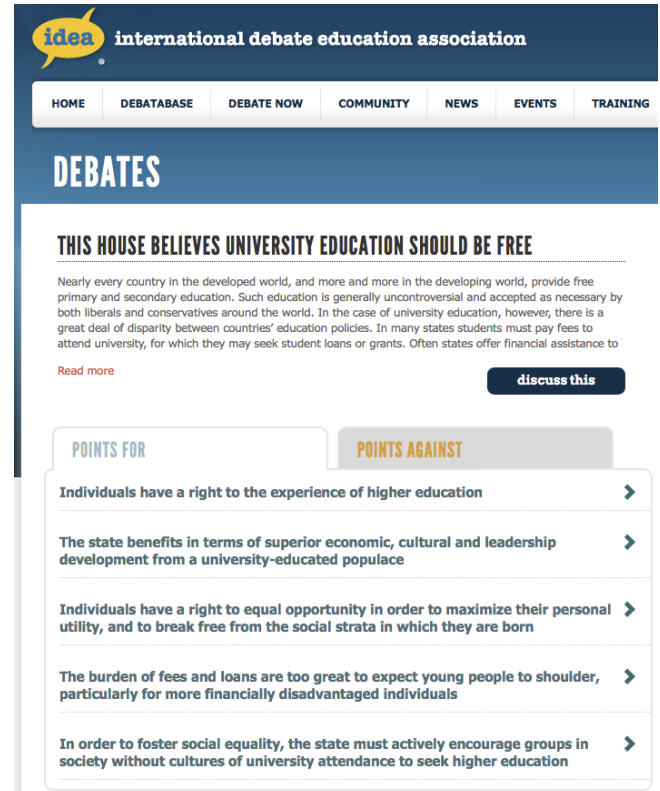
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## Corpus size and diversity beneficial for training robust classifiers

- 23,880 argumentative + 4800 non-argumentative labels for all themes
- Accessable at [www.uni-weimar.de/medien/webis/corpora](http://www.uni-weimar.de/medien/webis/corpora)



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# Towards a Web of Arguments

## Community platforms around argumentation

- Tools to create, combine, and explore structured argument data
- Facilitate critical thinking, good arguments, rational debates, ...
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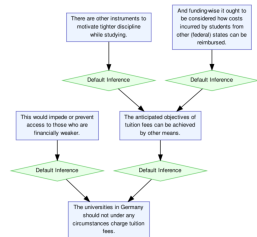


## Coverage of existing platforms

- Textual + visual argument browsers
- Argument search
- Annotation tools
- Editors for argument graphs
- Argument visualizations
- Structured discussion forums
- Corpus repositories
- Blogs on argumentation

# The Argument Web

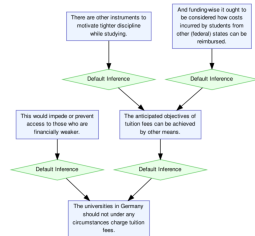
## AIFdb Corpora



Structured argument  
data in uniform format

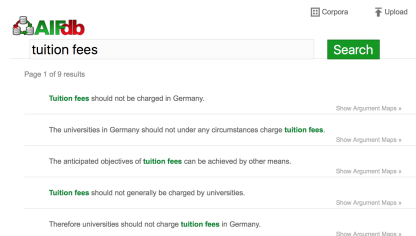
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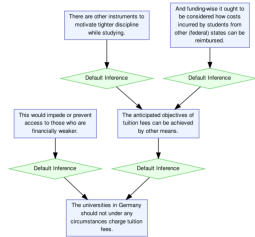
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Search interface for argument resources

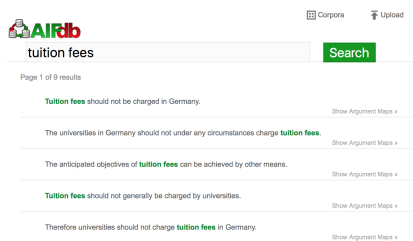
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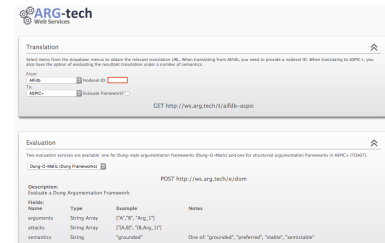
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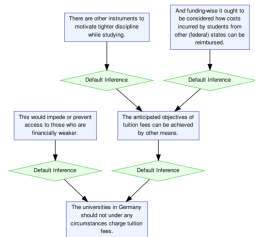
## ARG-tech API



Several argument web services

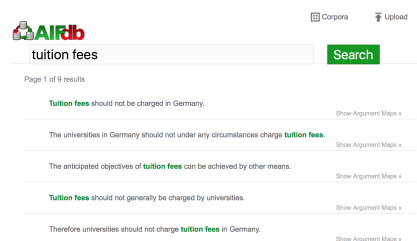
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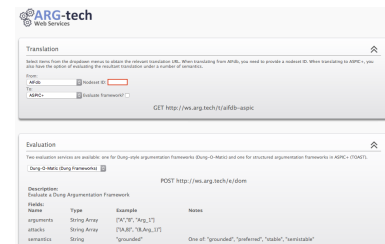
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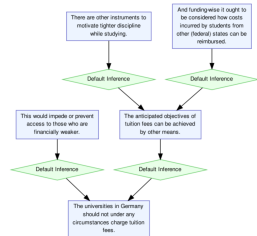


Widget for argument annotation in blogs



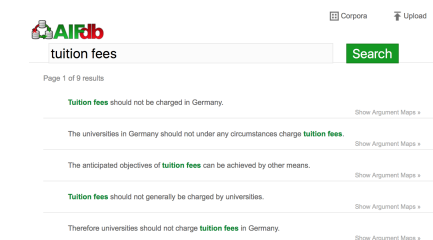
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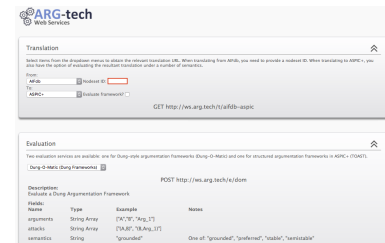
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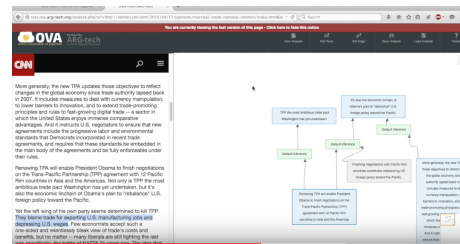
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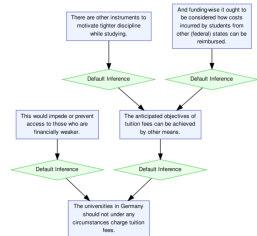
## OVA



Online visualization and analysis of arguments

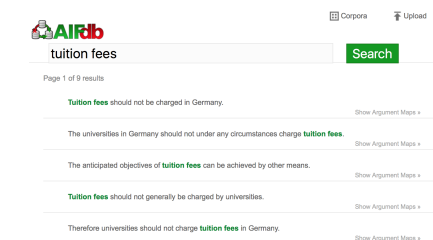
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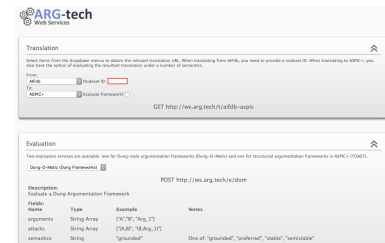
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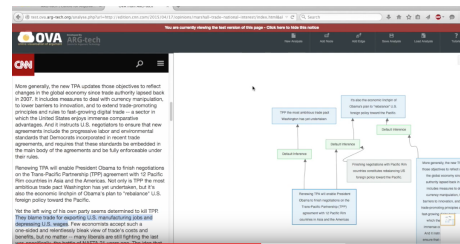
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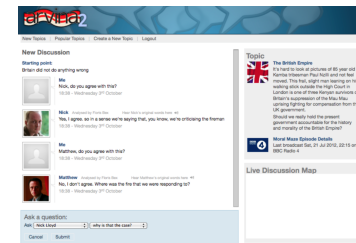
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Online visualization and analysis of arguments

## Arvina



Dialogue platform based on AIFdb

More at [www.argumentinterchange.org](http://www.argumentinterchange.org)

**argument interchange**  
Home of the AIF: Infrastructure for the argument web

# Conclusion

## **Many web resources with arguments already exist**

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- Semi-structured discussion forums
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- Controversial topics and argumentative texts
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## **Web resources provide extensive infrastructure**

- Tools for creation, exploration, and analysis
- Standard representations such as AIF
- Literature and other references

# References

- Al-Khatib et al. (2016):** K. Al-Khatib, H. Wachsmuth, M. Hagen, J. Köhler, and B. Stein. Cross-Domain Mining of Argumentative Text through Distant Supervision. In Proc. of the 15th NAACL: HLT, 1395–1404, 2016.
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- Tan et al. (2016):** C. Tan, V. Niculae, C. Danescu-Niculescu-Mizil, and L. Lee. Winning Arguments: Interaction Dynamics and Persuasion Strategies in Good-faith Online Discussions. In Proc. of the 25th WWW, 613–624, 2016.