

# NLP und Journalismus

## Journalismus und NLP

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### Inhalt

Computerlinguisten arbeiten mit Texten. Journalisten arbeiten mit Texten. Zwischen den beiden Gebieten besteht eine natürliche Nähe, die erst seit kurzem thematisiert wird. Im Seminar werden wir ausloten, welche Anwendungsmöglichkeiten es für NLP-Technologie im Bereich Journalismus gibt. Das betrifft sowohl 'alte' Themen wie die Unterstützung von Journalisten bei der Recherche durch Textmining und Textanalyse als auch hochaktuelle wie das Verifizieren der Authentizität von Meldungen (oder das Erkennen von 'Fake News'), das Moderieren von Kommentaren, die Erkennung von 'Hate Speech', usw.

Journalismus hat aber noch eine zweite Bedeutung für uns. Computerlinguisten sehen sich ebenso wie andere Wissenschaftler zunehmend der Erwartung ausgesetzt, ihre Arbeit persönlich und durch Medien vermittelt der Öffentlichkeit vorzustellen. Im Seminar werden wir deshalb statt oder in Ergänzung zu langweiligen Referaten verschiedene Formen der Kommunikation und der Wissenschaftskommunikation kennenlernen und einüben:

- Tages-/Wochenzeitung
- Wissenschaftsjournal
- Radio
- Fernsehen
- soziale Medien
- Podiumsdiskussion
- öffentliche Rede - ...

Wie können wir sicherstellen, daß unsere Aussagen unverfälscht und korrekt beim Rezipienten ankommen? Wie können wir für die Öffentlichkeit verständlich sein, ohne trivial zu werden?

Warnung: Thema und Form sind experimentell! Und: Die Benutzung von Smartphones, Tablets, Notebooks und anderen elektronischen Geräten ist im Seminar nicht gestattet.

## Literatur

- Proceedings of the 2016 IJCAI Workshop on Natural Language Processing meets Journalism, *New York, N.Y., 10 July 2016*
- Proceedings of the First Workshop on Abusive Language Online, *Vancouver, B.C., Canada, 4 August 2017*
- Proceedings of the Events and Stories in the News Workshop, *Vancouver, B.C., Canada, 4 August 2017*
- Proceedings of the Workshop on Natural Language Processing Meets Journalism. *Copenhagen, Denmark, 9 September, 2017.*

## Termine, Themenvorschläge

**24.10.2017**

**Einführung, Motivation, ...**

**31.10.2017**

**fällt aus:** Feiertag

**07.11.2017**

**Podiumsdiskussion zu *Filter Bubble in Recommender Systems*: Steffen Knapp, Stefanie Kühner, Sarina Meyer, Till Nöcher, Christoph Schaller, Annalena Sailer**

Überblick über *Recommender Systems*: (Koren & Bell, 2011)

*Filter Bubble* – Realität: (Pariser, 2011; Bozdag, 2013; Bozdag & van den Hoven, 2015; Sunstein, 2017)

*Filter Bubble* – Fiktion/reparierbar: (Zhang et al., 2012)

*Filter Bubble, Fairness* in Recommender Systems (Zhang & Hurley, 2008; Vargas & Castells, 2011; Adomavicius & Kwon, 2012; Nguyen et al., 2014; Castells et al., 2015; Burke et al., 2017; Huang & Yao, 2017)

*Filter Bubble* in Search: (Santos et al., 2015) ...

*Filter Bubble* in Social Networks: (Garimella et al., 2017b; 2017a) ...

**zur Vorbereitung:** (Bozdag & van den Hoven, 2015)

**Textbeitrag:** Skript für einen 3-minütigen Beitrag zu einer Podiumsdiskussion zum Thema *Filter Bubble* in Recommender Systems. Dazu gehört eine Erklärung und eine Meinung. Fragen dazu bitte an mich.

**14.11.2017**

**Diskussion zu *Filter Bubble*: Was kann NLP leisten? Michael Strube (45 min.)**

Literatur für *Recommendation Systems* 07.11.2017; und als Anregung (Carbonell & Goldstein, 1998; Santos et al., 2015; Degaetano-Ortlieb & Teich, 2017; Nema et al., 2017; Zhao et al., 2017)

**Vortrag zu TV Sprache: Melanie Schindler (15 min.)**

**Genre News; Journalistische Texte als Daten in der Computerlinguistik: Jason Brockmeyer, Utaemon Toyota (30 min.)**

*Lead Baseline* in der automatischen Zusammenfassung, Genre Zeitungstexte (Mihalcea & Ceylan, 2007; Yang et al., 2017)

allgemein über Genre: (Swales, 1990; Kessler et al., 1997; Wolters & Kirsten, 1999; Sarkar et al., 2005; Passonneau et al., 2014) Diskurskonnektive, Diskursparsing: (Webber, 2009)

**zur Vorbereitung:** (Passonneau et al., 2014) (Fragen im Hinblick auf Genre News)

**Textbeitrag:** *Filter Bubble* – Was kann NLP zur Auflösung der Filterblase leisten? Was können wir tun? (1/2 Seite mit Fokus auf Techniken)

**21.11.2017**

**fällt aus:** Michael Strube at HITS Gruppenleiter Retreat

**28.11.2017**

**fällt aus:** Michael Strube at IJCNLP 2017

**05.12.2017**

**fällt aus:** Michael Strube at HITS Scientific Advisory Board Meeting

**12.12.2018**

**Streitgespräch? Podiumsdiskussion? zu Überschriften in der Presse: Maja Hoffmann, Viktor Zimmermann, Lasse Becker-Czarnetzki, Daniel Wachter, Stoyan Dimitrov, Utaemon Toyota (55 min.)**

(Banko et al., 2000; Dorr et al., 2003; Alfonseca et al., 2013; Chesney et al., 2017; Gatti et al., 2016; Szymanski et al., 2016; Lemke et al., 2017; Piotrkowicz et al., 2017)

**zur Linguistik der Überschrift in der Presse:** (Lindemann, 1990; Schaffer, 1995; Bucaria, 2004; Infantidou, 2008; Blom & Hansen, 2015)

**Text Analytics für Journalisten: Inhalte, Optimierung, Visualisierung: Arthur Neidlein, Uli Steinbach, Jason Brockmeyer (40 min.)**

Inhalte: (Freitas & Ji, 2016)

Unterstützung: (Bougiatiotis et al., 2016; Gravier et al., 2016; Kiomourtzis et al., 2016; Cucchiarelli et al., 2017)

Visualisierung: (Tannier, 2016; Bois et al., 2017; Laban & Hearst, 2017; van Meersbergen et al., 2017)

**zur Vorbereitung:** (Hardt & Rambow, 2017) oder (Freitas & Ji, 2016) oder (Chesney et al., 2017) oder (Gatti et al., 2016)

**Textbeitrag (ungefähr 1 Seite):** Wählen Sie eines der Papiere unter *zur Linguistik der Überschrift in der Presse* aus, sammeln zehn Überschriften aus der Presse und untersuchen Sie diese mit Hilfe des gewählten Papiers.

**19.12.2017**

**Fortsetzung Text Analytics (15 min.)**

**3 Minute Madness zu Framing: Sarina Meyer, Annalena Sailer, Christoph Schaller, Steffen Knapp, Nadja Heinzen, DaaJe Meiners, Melanie Schindler, Stefanie Kühner (75 min.)**

(Dardis et al., 2008; Baumgartner et al., 2009; Boydston, 2013; Boydston et al., 2014; Baumer et al., 2015; Card et al., 2015; Tsur et al., 2015; Card et al., 2016; Johnson et al., 2017)

**zur Vorbereitung: (Card et al., 2015)**

**Textbeitrag: (ungefähr 1/2-1 Seite):** Wählen Sie ein Thema, das in der Presse diskutiert wird. Wählen Sie zwei kontroverse Meinungen und beschreiben den Rahmen (?)/die Perspektive (?) (*Frame*), den der Autor einnimmt.

**09.01.2018**

**verschoben auf den 9.1.18: Qualität von Zeitungstexten: Eva Ngatchen – Michael Strube (15 min.)**

(Hardt & Rambow, 2017; Tamori et al., 2017)

**Authentizität von Meldungen, Fake News: Daniel Schubert, Nadja Heinzen, Daniel Wachter, Eva Ngatchen, Utaemon Toyota**

aktuelle Arbeiten zu *Uncertainty, Rumors, Deception* in den Medien: (Adel & Schütze, 2017; Li et al., 2017; Ma et al., 2017; Pisarevskaya, 2017; Son et al., 2017; Thorne et al., 2017; Volkova et al., 2017) und konkret zu *Fake News*: (Rashkin et al., 2017; Wang, 2017; Long et al., 2017)

(aktuelle) Arbeiten zu *Stance Detection*: (Thomas et al., 2006; Somasundaran & Wiebe, 2009; Hasan & Ng, 2013; 2014; Klenner et al., 2017; Misra et al., 2017)

*Fake News Challenge Stage 1: Stance Detection* (<http://www.fakenewschallenge.org/>)

*SemEval-2016 Task 6: Detecting Stance in Tweets* und *SemEval-2017 Task 8: RumourEval: Determining Rumour Veracity and Support for Rumours*

**Textbeitrag:** Beschreiben Sie kurz das *UCL Machine Reading-System* (<https://github.com/uclmr/fakenewschallenge>), das bei der *Fake News Challenge* (<http://www.fakenewschallenge.org/>) Rang 3 belegt hat? Was ist cool an

dem System? (1/2-1 Seite)

**zur Vorbereitung:** (Rashkin et al., 2017) oder (Wang, 2017) oder (Long et al., 2017)

**16.01.2018**

**Fortsetzung Authentizität von Meldungen, *Fake News*: Fabian Düker, Pauline Wyderka, Jason Brockmeyer**

**Gastvortrag: Angelika Kirilin – Masterarbeit zu *Fake News Detection***

**Diskussion: Was können wir tun?**

**zur Vorbereitung:** (Brandtzaeg et al., 2015) oder <https://jospang.wordpress.com/2017/05/07/fake-news-wieso-weshalb-warum-und-was-ist-das-uberhaupt/>

**Textbeitrag:** Sehen Sie sich an [https://www.youtube.com/watch?v=HfdWpy6mqWA&list=PLGBWUED4WiIbIw93\\_CCJiCr4doYo17XsE&index=16](https://www.youtube.com/watch?v=HfdWpy6mqWA&list=PLGBWUED4WiIbIw93_CCJiCr4doYo17XsE&index=16) – Vergleichen Sie die Herangehensweise von Deutscher Welle und ARD. Was können wir tun, um den Sendern zu helfen?

**23.01.2018**

***Fake News* und Gegensteuerung**

**Uli Steinbach** (15-20 min)

**Moderieren von Kommentaren, *Hate Speech*, *Abusive Language***

**Nadja Heinzen, Zoë Rae Zinser, Daniel Schubert, Daniel Wachter, Stoyan Dimitrov, Lasse Becker-Czarnetzki, Steffen Knapp**

(Clarke & Grieve, 2017; Gambäck & Sikdar, 2017; Kolhatkar & Taboada, 2017a; 2017b; Pavlopoulos et al., 2017a; 2017b; Serrà et al., 2017; Waseem & Hovy, 2016; Waseem, 2016; Tulkens et al., 2016)

**zur Vorbereitung:** (Schmidt & Wiegand, 2017) oder (Waseem et al., 2017)

**Textbeitrag:** Brianna Wu gab einen eingeladenen Vortrag auf “Abusive Language Workshop” nach der ACL 2017. Der Vortrag ist leider nicht als Video verfügbar. Stattdessen sehen Sie sich an: <https://www.youtube.com/watch?v=dMCN8jOlPAo>. Geben Sie die Problematik wieder, die Brianna Wu beschreibt. Was läuft falsch in der (Online-)Gesellschaft? – Optional: Wenn Sie Mut haben und es vertragen können, sehen Sie sich die Kommentare zu dem Video an. Kommentieren Sie die Kommentare.

**30.01.2018**

***Hate Speech Detection***

**Arthur Neidlein: System, Reddit-Korpus** (15 min)

**Podiumsdiskussion zu Moderieren von Kommentaren, *Hate Speech*, *Abusive Language*: Stoyan Dimitrov, Christoph Schaller, Annalena Sailer, Stefanie Kühner,**

**Fabian Düker, Pauline Wyderka**

**Textbeitrag:** Sehen Sie sich an: [https://www.youtube.com/watch?v=purzZqzVPO4&list=PLGBWUED4WiIbIw93\\_CCJiCr4doYol7XsE&index=13](https://www.youtube.com/watch?v=purzZqzVPO4&list=PLGBWUED4WiIbIw93_CCJiCr4doYol7XsE&index=13). Weshalb macht die Politik hier eine so schlechte Figur? – Ist das neue Gesetz die Lösung des Problems? – Was können wir tun?

**06.02.2018**

**Diskussion: Daniel Schubert, Arthur Neidlein ...**

**zur Vorbereitung: Offene Fragen, Kommentare, Kritik, Diskussionsvorschläge zum gesamten Semester – auch: was haben wir vergessen? gibt es einen Punkt, über den wir noch sprechen müssen?** (mir bitte zusenden bis spätestens 05.02.18, 13 Uhr!)

### **Bemerkungen:**

**Leistungsnachweise:** Lektüre und aktive Teilnahme (1/3), mind. 3 mal Teilnahme an Sitzungsleitung, Podiumsdiskussion etc. (1/3), Textbeiträge per Email als PDF bis spätestens 13 Uhr am Montag vor der Sitzung an mich (1/3).

Regelmäßige Teilnahme (d.i. nicht mehr als einmal unentschuldigtes Fehlen) ist Voraussetzung für den Scheinerwerb. Zu jeder Sitzung müssen jeweils zwei Fragen (!) zu einem Papier abgegeben werden, das in der aktuellen Sitzung vorgestellt wird. Abgabe entweder per Email bis spätestens 13 Uhr am Montag vor der Sitzung (oder – im Notfall – schriftlich direkt vor der Sitzung). Dies geht in die Bewertung für aktive Teilnahme am Seminar ein.

**Literatur:** Viele Papiere können direkt aus der *ACL Anthology* kopiert werden (<http://acl.ldc.upenn.edu/>), insbesondere alle Papiere der (*E/NA*)*ACL*-, *Coling*- und *EMNLP*-Konferenzen, alle Workshops, die im Rahmen dieser Konferenzen veranstaltet wurden und die Zeitschrift *Computational Linguistics*. Papiere, die von der *AAAI* publiziert wurden (*AAAI*-Konferenz, *AAAI*-Workshops, *AAAI*-Symposia, etc.) sind in der *AAAI Digital Library* verfügbar (<http://www.aaai.org/Library>). – Die meisten weiteren Zeitschriften sind elektronisch verfügbar über die UB (<http://rzblx1.uni-regensburg.de/ezeit/search.phtml?bibid=UBHE>) – oder stehen dort im Regal.

**Sprechstunde:** Auf Vereinbarung (Email, Telefon) bei mir im Büro, ggf. auch im Anschluß an das Seminar.

## References

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