## Topic Detection and Tracking

Marc-André Faucher Jeff How Jonathan Villemaire-Krajden

June 6, 2013

## 1 References

## References

- James Allan. Topic detection and tracking: event-based information organization. Kluwer Academic Publishers, Norwell, MA, USA, 2002. ISBN 0-7923-7664-1.
- James Allan, Jaime Carbonell, George Doddington, Jonathan Yamron, Yiming Yang, James Allan Umass, Brian Archibald Cmu, Doug Beeferman Cmu, Adam Berger Cmu, Ralf Brown Cmu, Ira Carp Dragon, George Doddington Darpa, Alex Hauptmann Cmu, John Lafferty Cmu, Victor Lavrenko Umass, Xin Liu Cmu, Steve Lowe Dragon, Paul Van Mulbregt Dragon, Ron Papka Umass, Thomas Pierce Cmu, Jay Ponte Umass, and Mike Scudder Umass. Topic detection and tracking pilot study final report. In *In Proceedings of the DARPA Broadcast News Transcription and Understanding Workshop*, pages 194–218, 1998.
- James Allan, Victor Lavrenko, Daniella Malin, and Russell Swan. Detections, bounds, and timelines: Umass and tdt-3. In *Proceedings of Topic Detection and Tracking Workshop (TDT-3)*, pages 167–174. Vienna, VA, 2000. URL http://maroo.cs.umass.edu/pdf/IR-201.pdf.
- James Allen. Natural language understanding (2nd ed.). Benjamin-Cummings Publishing Co., Inc., Redwood City, CA, USA, 1995. ISBN 0-8053-0334-0.
- Jaime Carbonell, Yiming Yang, John Lafferty, Ralf D Brown, Tom Pierce, and Xin Liu. Cmu report on tdt-2: Segmentation, detection and tracking. In Proceedings of the DARPA Broadcast News Workshop, pages 117-120, 1999. URL http://www.cs.cmu.edu/afs/.cs.cmu.edu/Web/People/jgc/publication/CMU\_Approach\_TDT\_Segmentation\_DARPA\_1999.pdf.

- Julien Dubuc. Modeling the evolving structure of social text for information extraction and topic detection. Master's thesis, Concordia University, April 2011. URL http://spectrum.library.concordia.ca/7291/.
- Pyung Kim and Sung Hyon Myaeng. Usefulness of temporal information automatically extracted from news articles for topic tracking. 3(4):227–242, December 2004. ISSN 1530-0226. doi: 10.1145/1039621.1039624. URL http://doi.acm.org/10.1145/1039621.1039624.
- Jimmy Lin, Rion Snow, and William Morgan. Smoothing techniques for adaptive online language models: topic tracking in tweet streams. In Proceedings of the 17th ACM SIGKDD international conference on Knowledge discovery and data mining, KDD '11, pages 422-429, New York, NY, USA, 2011. ACM. ISBN 978-1-4503-0813-7. doi: 10.1145/2020408.2020476. URL http://doi.acm.org/10.1145/2020408.2020476.
- Juha Makkonen and Helena Ahonen-Myka. Utilizing temporal information in topic detection and tracking. In Traugott Koch and IngeborgTorvik Sølvberg, editors, Research and Advanced Technology for Digital Libraries, volume 2769 of Lecture Notes in Computer Science, pages 393–404. Springer Berlin Heidelberg, 2003. ISBN 978-3-540-40726-3. doi: 10.1007/978-3-540-45175-4\_36. URL http://dx.doi.org/10.1007/978-3-540-45175-4\_36.
- Christopher D. Manning, Prabhakar Raghavan, and Hinrich Schütze. Introduction to Information Retrieval. Cambridge University Press, New York, NY, USA, 2008. ISBN 0521865719, 9780521865715.
- Masaki Mori, Takao Miura, and Isamu Shioya. Topic detection and tracking for news web pages. In *Proceedings of the 2006 IEEE/WIC/ACM International Conference on Web Intelligence*, WI '06, pages 338–342, Washington, DC, USA, 2006a. IEEE Computer Society. ISBN 0-7695-2747-7. doi: 10.1109/WI. 2006.171. URL http://dx.doi.org/10.1109/WI.2006.171.
- Masaki Mori, Takao Miura, and Isamu Shioya. Topic detection and tracking for news web pages. In *Proceedings of the 2006 IEEE/WIC/ACM International Conference on Web Intelligence*, pages 338–342. IEEE Computer Society, 2006b. URL http://dl.acm.org/ft\_gateway.cfm?id=1249137&ftid=424651&dwn=1&CFID=335586259&CFTOKEN=54546832.
- Ankan Saha and Vikas Sindhwani. Learning evolving and emerging topics in social media: A dynamic nmf approach with temporal regularization. In *Proceedings of the fifth ACM international conference on Web search and data mining*, pages 693-702. ACM, 2012. URL http://people.cs.uchicago.edu/~ankans/Papers/wsdm227-saha.pdf.
- Hassan Sayyadi, Matthew Hurst, and Alexey Maykov. Event detection and tracking in social streams. In *Proceedings of International Conference on Weblogs and Social Media (ICWSM)*,

- 2009. URL http://www.cs.umd.edu/~sayyadi/files/papers/9-sayyadi-EventDetection\_KeyGraph\_ICWSM09.pdf.
- Benyah Shaparenko, Rich Caruana, Johannes Gehrke, and Thorsten Joachims. Identifying temporal patterns and key players in document collections. In *Proceedings, AMAST 95*, pages 165–174. Springer, 1995.
- Russell Swan and James Allan. Extracting significant time varying features from text. In *Proceedings of the eighth international conference on Information and knowledge management*, CIKM '99, pages 38–45, New York, NY, USA, 1999. ACM. ISBN 1-58113-146-1. doi: 10.1145/319950.319956. URL http://doi.acm.org/10.1145/319950.319956.
- Russell Swan and James Allan. Automatic generation of overview timelines. In *Proceedings of the 23rd annual international ACM SIGIR conference on Research and development in information retrieval*, SIGIR '00, pages 49–56, New York, NY, USA, 2000. ACM. ISBN 1-58113-226-3. doi: 10.1145/345508. 345546. URL http://doi.acm.org/10.1145/345508.345546.
- Russell Swan and David Jensen. Timemines: Constructing timelines with statistical models of word usage, 2000. URL http://www.cs.cmu.edu/~yiming/courses/papers/tdt/russell.kdd00.ps.gz.