# Sentiment strength detection for the Social Web

This course will offer an introduction to automatic sentiment analysis in the social web and equip participants to apply this kind of method in appropriate contexts and to understand a range of different approaches for sentiment analysis, although focusing on the SentiStrength application. The course will also discuss the particular problems associated with sentiment analysis in the social web as well as strategies to take advantage of features like emoticons to improve the automatic prediction of online sentiment. The main topics will be:

*Introduction to sentiment strength detection*: introduction to SentiStrength for short informal text sentiment strength detection, discussion of major issues in sentiment strength detection online and ways to exploit non-standard methods of expressing emotion online.

*Sentiment analysis applications:* Cross-validation as an evaluation strategy, feature selection and creating a gold standard accuracy measures. Evaluation of SentiStrength and other systems.

*Adapting systems for different domains and languages*: The importance of domain in sentiment analysis, methods for transferring methods from one domain to another. Domain-independent methods. Language issues and methods to translate a sentiment analysis method from one language to another.

**References: (download the first 3 from: http://www.scit.wlv.ac.uk/~cm1993/mycv.html)**

Thelwall, M., & Buckley, K. (in press). Topic-based sentiment analysis for the Social Web: The role of mood and issue-related words. Journal of the American Society for Information Science and Technology.

Thelwall, M., Buckley, K., & Paltoglou, G. (2011). Sentiment in Twitter events. Journal of the American Society for Information Science and Technology, 62(2), 406-418.

Thelwall, M., Buckley, K., Paltoglou, G., Cai, D., & Kappas, A. (2010). Sentiment strength detection in short informal text. Journal of the American Society for Information Science and Technology, 61(12), 2544–2558.

Pang, B. & Lee, L. (2008). Opinion mining and sentiment analysis, Foundations and Trends in Information Retrieval 2(1-2), pp. 1–135. (available online)

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| **Room 523** | **Tuesday**  **July 23** | **Wednesday**  **July 24** | *Campus Catalunya Universitat Rovira i Virgili*  *Avinguda Catalunya, 35*  *43002 Tarragona* |
| **11:10-13:00** |  | Mike Thelwall 2 |
| **17:10-19:00** |  | Mike Thelwall 3 |
| **19:10-21:00** | Mike Thelwall 1 |  |

Lecture 1: Sentiment strength detection for the social web with SentiStrength

* Lecture 1a: Sentiment strength detection with SentiStrength - Version 1
* Lecture 1b: Sentiment strength detection with SentiStrength - Version 2
* Lecture 1c: Sentiment strength detection: SentiStrength applications

Lecture 2: Sentiment analysis methods and evaluation

* Lecture 2a: Sentiment analysis tasks and methods
* Lecture 2b: Gold standards and feature selection
* Lecture 2c: Sentiment analysis Evaluation

Lecture 3: Using and adapting sentiment analysis systems

* Lecture 3a: Adapting sentiment analysis systems for different domains
* Lecture 3b: Using SentiStrength
* Lecture 3c: Modifying SentiStrength