

ΓΕ77

# COMPUTATIONAL LINGUISTICS

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# ΥΛΗ ΕΞΕΤΑΣΕΩΝ

Lectures Recap

# LECTURES RECAP

- Lecture I: Course and Historical OVERVIEW
  - Karen Sparck Jones (1994). Natural Language Processing: A Historical Review. In A. Zampolli, N. Calzolari & M. Palmer *Current issues in computational linguistics: in honour of Don Walker*. *Linguistica Computazionale*, vol. 9-10, pp. 3-16. Pisa, Dordrecht.
  - Jurafsky D. & J. Martin (2008). SPEECH and LANGUAGE PROCESSING An introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (2nd Edition + 3rd Edition). CHAPTER 1.
- Lecture 2-3: **Basic Text Processing:** Regular Expressions, Text Normalization & Edit Distance
  - Jurafsky D. & J. Martin (2008). SPEECH and LANGUAGE PROCESSING An introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (2nd Edition + 3rd Edition). CHAPTER 2.

# LECTURES RECAP

- Lecture 4: Language Modelling with N-Grams
  - Jurafsky D. & J. Martin (2017). SPEECH and LANGUAGE PROCESSING An introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (3rd Edition). CHAPTER 4.
- Lecture 5-6: Morphology and Finite-State automata
  - Jurafsky D. & J. Martin (2008). SPEECH and LANGUAGE PROCESSING An introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (2nd Edition). CHAPTER 2.
- Lecture 7-8: Words and Transducers
  - Jurafsky D. & J. Martin (2008). SPEECH and LANGUAGE PROCESSING An introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (2nd Edition). CHAPTER 3.
  - Μαρκόπουλος, Γ. (1997). *Υπολογιστική Επεξεργασία του Ελληνικού Ονόματος*. Διδακτορική διατριβή (σσ. 99-106).
  - Πετροπούλου, Ε. (2012). *Η Σύνθεση με Δεσμευμένο Θέμα στην Αγγλική και τη Νέα Ελληνική Θεωρητική Ανάλυση και Υπολογιστική Επεξεργασία*. Διδακτορική διατριβή ((σσ. 160-164)-172)).

# LECTURES RECAP

- Lecture 9-10: Corpus Linguistics I and II
- Lecture 12: Advanced Topics of Computational Linguistics
  - No Reading
- Lecture 11: Machine Learning
  - GOLDSMITH John 2001. Unsupervised Learning of the Morphology of a Natural Language. *Computational Linguistics* 27(2), pp. 153-198.
  - DELL' ORLETTA Felice, LENCI Alessandro, MONTEMAGNI Simonetta & PIRRELLI Vito 2007. Corpus-based modeling of grammar variation. In A. Sansò (ed.) *Language Resources and Linguistics Theory*, pp. 38-55. [Materiali Linguistici 59]. Milano: Franco Angeli.
  - KEULEERS Emmanuel & DAELEMANS Walter 2007. Memory-based Learning of Inflectional Morphology: A methodological case study. *Lingue e Linguaggio* VI.2, pp. 151-174. Bologna: Il Mulino.
  - FLORIAN Radu & NGAI Grace 2001. Multidimensional transformational-based learning. In *Proceedings of the 5<sup>th</sup> Conference on Computational Natural Language Learning*, pp. 1-8.
  - ΚΑΡΑΣΙΜΟΣ Αθανάσιος 2011. Υπολογιστική Επεξεργασία της Αλλομορφίας στην Παραγωγή Λέξεων της Νέας Ελληνικής (κεφάλαιο 4<sup>ο</sup>). Διδακτορική διατριβή. Πάτρα: Πανεπιστήμιο Πατρών.