



# Master in Artificial Intelligence (UPC-URV-UB)

## Master's Thesis Proposal<sup>1</sup>

### General Information

Title: Intelligent RSS Reader

Expiry Date:

Modality:  technological project  
 research work

Advisor/s: Javier Béjar

Advisor's Dept. & Univ.: LSI,UPC

Advisor/s e-mail: bejar@lsi.upc.edu

Observations:

Student's Name:  
(if already known)

### M.Sc. Thesis Description

Main issues / Brief Description [Mandatory]:

The goal is to develop an RSS reader able to perform different tasks

- \* Recommendation of other RSS sources based on information from other users
- \* Recommendation of other RSS sources based in user preferences
- \* Valoration of articles from an RSS source already subscribed
- \* Create a classification of the articles of his RSS sources

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<sup>1</sup> **Each M.Sc. Th. Proposal should be in a separate file, named as follows: "MSc-Th-Proposal-2-or-3-title-first-words-Advisor/s-AcademicYear.pdf".**

For Example: "MSc-Th-Proposal-Syntactic-and-Semantic-LluisMarquez&JesusGimenez-1011.pdf"  
The proposal could be elaborated with any text processor (Word, Openoffice, etc.), but **the file electronically delivered** to LSI Dept. Secretary ([merce@lsi.upc.edu](mailto:merce@lsi.upc.edu)) **MUST BE a single PDF file**

Detailed Description including a task planning [Mandatory]:

The goal is to develop a prototype of RSS reader able to learn the user preferences and use this information to obtain recommendations, article valorations and an organization of his RSS sources.

This tasks have to be solved using the textual information obtained from the articles of the RSS sources the user has subscribed and the feedback from the user valorations and behaviour.

This project involves:

- \* The study of recommendation systems
- \* The study of supervised and unsupervised methods for text classification
- \* The study of methodologies for obtaining unsupervisedly word tags from documents , building shallow ontologies and extraction of characteristics from text

References [Mandatory]:

Pazzani, M.J., Billsus, D.: Content-Based Recommendation Systems. In: Brusilovsky, P., Kobsa, A., Nejdl, W. (eds.) The Adaptive Web: Methods and Strategies of Web Personalization. LNCS, vol. 4321, pp. 325-341. Springer, Heidelberg (2007)

Schafer, J.B., Frankowski, D., Herlocker, J., Sen, S.: Collaborative Filtering Recommender Systems. In: Brusilovsky, P., Kobsa, A., Nejdl, W. (eds.) The Adaptive Web: Methods and Strategies of Web Personalization. LNCS, vol. 4321, pp. 291-324. Springer, Heidelberg (2007).

Rajaraman, A, Ullman, Mining Massive Datasets <http://infolab.stanford.edu/~ullman/mmds.html>

[T. Hastie](#) and [R. Tibshirani](#) and [J. Friedman](#) The Elements of Statistical Learning: Data Mining, Inference and Prediction, Springer-Verlag, 2001.

Minimal Requirements & Previous Knowledge [Optional]:

Other comments [Optional]:

We recommend applicants to have minimal knowledge of machine learning and data mining although it is not a sine qua non condition.

Location and Date: Barcelona, March 8th 2011

**To the Academic Commission of the Master in Artificial  
Intelligence (CAIMIA)**