

**Stage / Internship 6 months at the ETIS Lab UMR 8051
(University Paris Seine, University of Cergy Pontoise, ENSEA, CNRS)**

Title

Capturing twitter streams for opinion mining on airport noise

Supervisors

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Description

Understanding the opinion of the users on specific matters (like events, public issues/debates, other people) is a hard task to be done automatically and for any event. But with the expansion of social media use, we have a source of information where people express (sometimes passionately) their opinions and participate in discussions, which we can track as they happen. Recently, social media are used to substitute traditional surveying methods like on the spot interviews or phone or web surveys. In this project, we plan to do the same but to limit our research on users who live in the area of the airport and discuss about noise problems emanating from the landing and takeoff of aircraft.

The collected information can be used in several ways:

- (1) At the social media level, we can monitor discussions and exchanges over airport generated noise issues and try to understand if there are particular events that concern the users. We can analyze both the volume of a conversation in terms of numbers of posts and users but also the connections among these users (their social graph) and understand the possible influences and influencers.*
- (2) Tracking events through discussions on social media would allow us to also understand whether something out of the ordinary has happened and how the involved parties are reacting to this (e.g. through increased number of posts, etc.). This would require real time monitoring of the users' interactions on social media.*

The main goal of the work in this project will be the setup of a customizable platform that will be able to capture the stream of relevant tweets generated by the users, store it offline, identify the users involved in the discussions and build the social networks of discussions around them. Also we would like to characterize the discussions based on location and relevance to the subject of our research (airport noise).

We will do this by applying text mining and information retrieval techniques, combined with opinion mining techniques from social media texts and network analytics in order to analyze and build the correct social graph of the involved users.

This work is part of the EU-funded research project ANIMA.

Candidate

We are looking for a 2nd year Master Student (M2) that wants to do a 6-month internship with us. This can be combined with his/her master thesis.

Application info

The position will be opened until filled. Starting date ideally is 01/04/2018. Apply by sending an e-mail with your CV, recommendation letters and grades for at least the 1st and 2nd year of the Master (M1 and M2) to:

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