



ALMA Competition is organized by the IEEE SMC Society aiming to identify methods and algorithms that will help move towards (more) Autonomous Learning Machines.

Background:

In Machine Learning from Data, the wide variety of methods that exists is still reliant on handcrafting by human decision maker, expert or programmer. For example, even in such methods that are named unsupervised a human made decision is required upfront in regards to: i) feature selection; ii) type of data distribution; iii) number of clusters or thresholds, radii, etc. iv) data (in)dependence; v) type of distance metric, etc. The goal of this competition (and Autonomous Learning Machines, in general) is to increase the level of autonomy of the learning algorithms, whereby the ideal is to have methods and algorithms that require no human involvement at all.

In this competition, the success will be judged by how close an algorithm and method is to this goal and not by how much the accuracy, purity or other measure of quality is achieved; how much time or complexity of the algorithms require. Of course, these parameters of the quality of the algorithms and methods will also be taken into account, but as a secondary ones, not the main.

ALMA Competition Tracks:

1. New data sets and streams that are suitable demonstrators for the topic of the competition.
2. New methods and algorithms for Autonomous Learning Machines :
 - Anomaly Detection
 - Clustering
 - Classification
 - Control
 - Prediction

Awards:



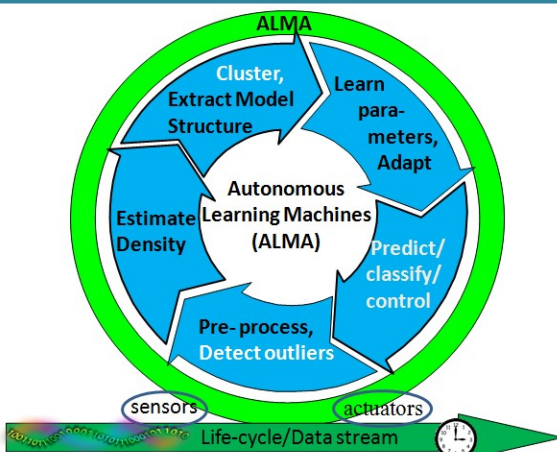
Track 1 - **\$1000**

Track 2 - **\$5000 (\$1000 in each category)**

Important Dates:

January 31, 2017. Deadline for submitting the algorithms in open source GNU license format. The proposed methods and algorithms **must be described in form of papers and submitted to the ALMA Competition track of EAIS 2017** (<http://msc.fe.uni-lj.si/eais2017/>) and presented at the conference (which will be held in Ljubljana, Slovenia).

May 31- June 2, 2017. Results will be announced during the conference **EAIS 2017**.



Organized and Sponsored by:



IEEE

Technical Committee
on Evolving
Intelligent Systems