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## VISIONSPACE TECHNOLOGIES INTRODUCES INCREMENTAL DBSCAN

An incremental clustering algorithm for Green Computing

**Matosinhos, Portugal, July 28, 2015** – Within the project GREENSSCM (Green Software for Space Control Mission), VisionSpace Technologies has implemented an incremental clustering algorithm to support iGreen software.

Clustering is a method capable of grouping a set of elements in groups of similar ones.

At the green project, we look for reduce the energy consumption in software execution by predicting the best optimizations to apply in the source code. One of the main processes is cluster repositories, allowing then a classification of new pieces of code.

As clustering is a computationally expensive one-time algorithm and we want to update the database as needed, is poorly desirable to perform a full clustering process each time. Thus, Incremental DBSCAN offers a solution to perform an incrementally clustering update.

It brings a huge advantage in such situations, decreasing substantially the database's update time.

The integration with recognized data mining frameworks is one of the added values, taking advantage of their modular structure to incorporate the algorithm.

### About VisionSpace Technologies

VisionSpace Technologies has been building up a first-class reputation in high-technology markets, where quality and reliability are essential. Our roots are in the Aerospace industry and

the experience we have developed there brings benefits to our other core markets of Security and Independent Software Verification and Validation.

Visit [www.visionspace.com](http://www.visionspace.com) for more information about us.