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PRESS RELEASE

Intelligent predictive and proactive technology by the European research project SPEEDD

Can we predict and avoid traffic jams? What about the use of stolen credit cards? How quickly can we do it? These are just some of the difficult questions that the European project "SPEEDD" is called to respond upon.

Researchers working on the SPEEDD project design and implement innovative event analysis systems and algorithms for rapid and proactive decision-making. Additionally, they have created innovative visualisation tools to help users and organisations on the demanding task of event forecasting thus helping them take appropriate proactive decisions.

The role of real users in SPEEDD's success so far has been instrumental. As an example, SPEEDD technology partners cooperate with the traffic control center in the French city of Grenoble, in anticipation of helping to avoid congestion in the city. Similarly, cooperation with financial institutions is leading the creation of the corresponding application which will help avoid financial fraud.

These applications are supported by the integrated SPEEDD prototype, which incorporates new technologies for identifying and predicting events and making real-time decisions. Indicatively, some of the achievements of the project so far are:

- traffic simulator for the city of Grenoble,
- recognition and prediction of events from uncertain data flow with the PROTON system,
- dynamic decision making algorithms,
- algorithms for learning prediction rules from data,
- distributed machine learning algorithms for processing large amounts of data,
- visualisation platform for data flows of events and decisions,
- integrated SPEEDD prototype, based on asynchronous communication between computing nodes (Storm, Kafka).

"The volume, diversity, and uncertainty prevailing in large data streams are both a great challenge and a unique opportunity for us" says the coordinator of SPEEDD, Georgios Paliouras from NCSR "Demokritos". "The recognition and prediction of complex events, such as those involving financial fraud, and the proactive decision-making requires a combination of innovative technologies. This blending of technologies is what makes the SPEEDD project such an interesting effort!"

Entering the final year of the project, SPEEDD heads to achieve its ultimate objective which is to create a user-friendly, innovative system which will allow businesses to make smart decisions, in real time, turning the huge volume of heterogeneous and uncertain information into useful knowledge.

In addition to the coordinator, NCSR "Demokritos", the SPEEDD consortium comprises:

- IBM Israel
- the Portuguese IT company Feedzai,
- French National Center for Scientific Research CNRS
- Technion Institute of Technology, Israel
- ETH Zurich, Switzerland, and the
- University of Birmingham, UK

Notes to Journalists

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 - SPEEDD website: <http://speedd-project.eu/>
 - The SPEEDD project logo is attached for your use.