

Researchers developing new type of internet search engine

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(Phys.org) -- Computer scientists at the University of Glasgow are participating in a new project to develop a search engine which will draw its results from sensors located in the physical world.

As the internet continues to expand, [public access](#) to net-connected sensors such as cameras and microphone arrays is increasing. The European-funded project, known as SMART, for ‘Search engine for Multimedia Environment geneRated content’, aims to develop and implement a system to allow internet users to search and analyse data from these sensors.

By matching search queries with information from sensors and cross-referencing data from social networks such as Twitter, users will be able to receive detailed responses to questions such as ‘What part of the city hosts live music events which my friends have been to recently?’ or ‘How busy is the city centre?’ Currently, standard search engines such as Google are not able to answer search queries of this type.

Dr Iadh Ounis, of the University of Glasgow’s School of Computing Science, said: “The SMART project will be built upon an open-source [search engine](#) technology known as Terrier we have been developing at the University since 2004, and we’re pleased to be involved in this innovative research initiative.

“The SMART engine will be able to answer high-level queries by automatically identifying cameras, microphones and other sensors that

can contribute to the query, then synthesising results stemming from distributed sources in an intelligent way.

“SMART builds upon the existing concept of ‘smart cities’, physical spaces which are covered in an array of intelligent sensors which communicate with each other and can be searched for information. The search results sourced from these smart cities can be reused across multiple applications, making the system more effective.

“We expect that SMART will be tested in a real city by 2014.”

The SMART project is a joint research initiative of nine partners including Atos, Athens Information Technology, IBM’s Haifa Research Lab, Imperial College London, City of Santander, PRISA Digital, Telesto and Consorzio S3 Log.

The SMART project is part of the University of Glasgow’s growing theme of research on sensor systems. The University aims to ensure that its research portfolio can provide entire sensor solutions, from novel physical [sensors](#), to intelligent applications and visualisations of sensor inputs. The University is also part of the Scottish Sensor Systems Centre, which is funded by the Scottish Funding Council and collaboration between eight of Scotland’s leading universities and industry to undertake joint industrial/academic projects into [sensor systems](#).

More information: For more information on SMART:
www.smartfp7.eu

Provided by University of Glasgow

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