



Fish4Knowledge Deliverable D6.7

Project Public Press Release

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Abstract: This document is the text for a public press release about the project.

Deliverable due: Month 2

Fish4Knowledge (“Supporting humans in knowledge gathering and question answering w.r.t. marine and environmental monitoring through analysis of multiple video streams”) is an EU Seventh Framework Programme project addressing issues related to large databases, including how to collect, store and extract useful information (Objective ICT-2009.4.3: Intelligent Information Management, Challenge 4: Digital Libraries and Content). The project partners are: Centrum Wiskunde & Informatica (Netherlands), National Applied Research Laboratories (Taiwan), Univ. of Edinburgh (United Kingdom) and Universita di Catania (Italy). The project is funded from October 1, 2010 through September 30, 2013.

The study of marine ecosystems is vital for understanding environmental effects, such as climate change and the effects of pollution, but is extremely difficult because of the inaccessibility of data. Undersea video data is usable but is tedious to analyse (for both raw video analysis and abstraction over massive sets of observations), and is mainly done by hand or with hand-crafted computational tools. Fish4Knowledge will allow a major increase in the ability to analyse this data: 1) Video analysis will automatically extract and annotate information about the observed marine animals which will be recorded in an observation database. 2) Interfaces will be designed to allow researchers to formulate higher level questions over that database without having to be computing specialists.

The project will use 2+ years of live video feeds from 10 underwater cameras and will investigate: information abstraction and storage methods for reducing the massive amount of video data (from 10E+15 pixels to 10E+12 units of information), machine and human vocabularies for describing fish and other marine animals and their behaviour, flexible process architectures to process the data and scientific queries and effective specialised user query interfaces. A combination of computer vision, database storage, workflow and human computer interaction methods will be used to achieve this.

What is particularly exciting about the project is the possibility of acquiring and analysing so much data about different fish species and their behaviour through a long period of time.

Project web site: <http://www.Fish4Knowledge.eu>

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