





## Fish4Knowledge Deliverable D6.8 Public deposit of software

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Dissemination: PU

**Abstract:** This document summarises the public deposit of the project software in SourceForge. Additionally, it documents the public deposit of the ground truth used for evaluating the fish detection, tracking, species recognition and behaviour analysis.

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## 1 Project Source Code

The project has set up a repository for the code used in the Fish4Knowledge executable system. The repository is on SourceForge at:

http://sourceforge.net/projects/fish4knowledgesourcecode/

By clicking on the 'Files' tab, one gets to the 7 sets of code that can be downloaded:

- 1. Fish Detection and Tracking
- 2. Fish Recognition
- 3. Workflow Management
- 4. User Interface
- 5. Component Interface and Integration
- 6. SQL Database Interface
- 7. Ground-truthing

By clicking on an appropriate name, one gets to a list of files. The 2 main files are a README file that describes the download and a tar file that contain the download files.

The README file, where appropriate:

- 1. says what the component does
- 2. describes how the component is interfaced
- 3. describes how the component is run, including the parameters and their allowable values
- 4. describes what system resources it uses
- 5. lists the modules in the component (and possibly tar files if the modules are in more than one file), with a sentence that describes what is in each module
- 6. explains how to make the executable from the source code
- 7. lists what inputs the component needs, and from where
- 8. lists what outputs the component creates, and to where
- 9. gives an indication of how long it runs
- 10. lists any known bugs/limitations of the code

## **2 Project Ground Truth**

The project generated ground truth to evaluate the technical algorithms that were developed during the project. The ground truth data is at:

http://groups.inf.ed.ac.uk/f4k/GROUNDTRUTH/.

That page points to the four ground truth datasets from the Fish4Knowledge project:

- 1. Fish detection from video: a set of images where the fish have been manually detected.
- 2. Fish trajectory tracking: a set of videos where the detected fish have been manually linked from frame-to-frame.
- 3. Fish species recognition: a set of segmented fish images labelled as being from one of the 23 main species, with instances linked by their trajectories.
- 4. Trajectory-based fish behaviour analysis: a set of trajectories classified as either normal or abnormal.