

OSMIA MEETING MINUTES

Subject: Project meeting

Purpose/Objectives: Review and discuss project progress

Date & Venue: 29.08.02 & 30.08.02 @ DCU, Dublin, Ireland

Reference: OSMIA-M2

Attendees: John Barron (JB), Paul Wheelan (PW), Neil Thacker (NAT),
Tony Lacey (AJL), Ovidiu Ghita (OG), Naser Prljca (NP), Ian Poole (IP),
Giovanni Buornacorsi (GB)

Distribution: All Above

Agenda

29.08.02

12.00	Introductions, apologies, appoint chairman and secretary	
12.10	Review experiences with TINA installation	DCU, UoWO
12.40	Progress report on 'tina5' open source release	UoM
13.00	Discussion	All
13.30	Progress report on NeatVision-TINA integration	DCU
14.00	Discussion	All
14.30	tea	
14.45	Progress report on integration of optical flow algorithms into TINA	UoWO
15.15	Discussion	All
15.45	Progress report on OSMIA interface system	Voxar, UoM
16.15	Discussion	All
17.00	End of day	

30.08.02

09.30	Discuss dissemination plan	All
10.00	Discuss review meeting in Brussels in October	All
10.30	Technical breakouts	All
12.30	Lunch	
14.00	Any other business	All
14.25	Date and place of next meeting	All
14.30	End of meeting	

Minutes

Apologies for Absence

None

Introductions, apologies and order of play

Chair PW, secretary NAT.

Review experiences with TINA installation

Installation difficult, varies on lap-tops and work stations. Seems to be tracked back to graphics libraries. Xview is antiquated, Motif is commercial, Lesstif is open source. Xview is preferred, there is only one version and TINA will work with that. TINA is designed to work with Lesstif 1.2.

AJL will make available downloadable versions of the Xview and Lesstif libraries as part of the project. The port to GTK scheduled for later in the project should overcome most of these problems too. Other problems with general installation should go away with the use of autoconfigure, which is available on all UNIX systems. The use of autoconfigure influences the organisation of the code-base. Other than the graphics the stereo software has also been seen to crash repeatedly under Motif on Linux, though there are no problems with it under Solaris.

There is so much trouble caused by the graphics libraries there should be something up front in the documentation which explains what must be done to make the software to work. The latest release of the technical memos have been useful. Coding guidelines would also be useful. The ultimate goal is to have a system with sufficient support and documentation so that as many external researchers as possible can be contributors. The combination of a named release and CVS system would go a long way to achieving.

Progress report on 'tina5' open source release

There is now a main web site which has links to manuals and memoranda and projects. We have mimicked the web site organisation for the statistical package 'R'. The developers site is more geared around the development of the libraries, latest releases, projects (such as OSMIA), this is up now and contains minutes of meetings and work package deliverables. This will be kept as up to date as possible. There is an ftp area which contains a snapshot of the current libraries, there will also be a nightly updated version of the current code-base. There needs to be a working mailing list, (developers and researchers/users) UoM has had problems with its email system but this should be online in the next few weeks. The CVS repository will not be put up until the software has been re-organised.

There are several issues with the code-base. We will be releasing version 5 of TINA at the end of this year. It should be more transparent how each function relates to each library and a more self consistent naming convention. IP has helped to re-design the way that header files are included. It is potentially worth downloading what is there already to test the auto-config on the construction of the 'sys' library. It should be possible to get the libraries to compile on a Windows platform under Sigwin, which contains an xserver which makes direct calls to the hardware. Xview has even been ported to this hardware. The existing documentation includes a programmers guide and a users guide. The programmers guide isn't really a programmers guide. It requires 'why' and how sections. The new one will contain programming style tips and how to's. We will need suggestions from people regarding what they would like to see in there based upon their experiences. We have set up a system to automatically generate text-info an html documentation which is laid out in a way which mimics the directory structure. A code browser and FAQ page already exists on the web site.

Progress report on NeatVision-TINA integration

A presentation of the work undertaken to date at DCU was given, which resulted in a discussion of the entry points which will be necessary to give both the access to TINA and future proofing of the software. Demonstrations were given on the current state of integration into NEAT vision, including mixed use of TINA and NEAT vision algorithms.

Progress report on integration of optical flow algorithms into TINA

Problems of byte reversal in going from PC to SUN. Otherwise two optical flow algorithms have been implemented Horn/Schunck and Lucas and Kanade. Two more will be added over the next eight months. JB will write a chapter describing the coding experience of putting this stuff into TINA and 3D optical flow, to be finished by April 2003. 3D extensions to Nagal and Uras et. al. are a possibility. A demonstration of the existing state of the software was given.

Progress report on OSMIA interface system

There are two lines emerging, development of an analysis server and getting low level access to TINA functions for testing. The OSMIA project has to have a minimal impact on the existing PnV interface and must be robust to changes in PnV libraries. It has been decided that the server will communicate via data transfer using the DICOM file format. Data required for processing can be passed using the concept of 'live images' which allows parameters to be passed to other software via the DICOM file format. The concept of the analysis server has many advantages for commercial exploitation.

IP has attempted to use the existing Tinatool interface. He is unhappy with the hidden state and the installation of Tv's and has a list of suggestions for the way that it might be fixed. He has started to browse the code based using doxygen and found this really useful. VOXAR are quite keen on looking at the tissue segmentation, particularly the unsupervised method. He will be using this as a focus to investigate the ease of access to TINA algorithms for industrial users.

Summary of previous day

Documentation in hand, software versioning and distribution in hand. The main issue appears to be how access is provided to TINA libraries. Perhaps we should aim to reduce a library specifically for access points to TINA functions. This would take the form of one (or several) wrapping libraries and a list of functions. We suggest taking the example of the sequence data structures. The main manpower at UoM is GB, at the moment he is working on other work packages, so it is probably going to be the end of the year before we can provide a template to DCU. It was decided that we should try to bring this date forward to the end of September (by using additional manpower at UoM) in order to make it possible for other members of the project to be able to continue their work.

Discuss dissemination plan

Will be completed before the end of the month. DCU plan to go to Inforad, RSNA and an IEE workshop on volumetric imaging Also the American ambassador to Ireland will be visiting DCU in September. Voxar will be visiting RSNA and ECR and will try to get something on the Voxar website. It is hoped that it will be possible to perform a 'proof of concept demonstration' of the OSMIA analysis server by the end of the year (in time for RSNA). JB will be going to the (Canadian) Vision Interface conference.

Discuss review meeting in Brussels in October

All partners happy for UoM personnel to represent the project at the review meeting.

Technical breakouts

NAT worked with JB and fixed the immediate problems with running the new optical flow with TINA. AJL worked with IP looking at the use of Doxygen. NP worked with IP looking at the integration of NEAT vision with Plug n View.

Any other business

Thanks to PW and Co. for the hospitality.

Date and Place of Next Meeting

Voxar, Edinburgh. Third week of Feb (TBC)