

## TINA Demo 004: The Linear Poisson Model Tool

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# TINA Demo 003: The Medical Vision Tool

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## 1 Introduction

Several methods for application of Linear Poisson Models to various real and simulated data sets are demonstrated here via the use of replay macros to configure the TINA environment, followed by a minimum number of button presses for the key stages. The main intention is to provide working examples which illustrate results in published papers.

## 2 Installation

In order to use the TINA stereo vision tool, you must already have compiled and installed the TINA libraries. See the TINA website

`http://www.tina-vision.net`

for instructions.

The TINA stereo vision tool project can be obtained either from the demos page of the TINA website or from the TINA CVS repository using the commands

```
cvs -d :pserver:anonymous@cvs.tina-vision.net:/home/tina/cvs login
(press enter when prompted for a password)
cvs -d :pserver:anonymous@cvs.tina-vision.net:/home/tina/cvs co tina-projects/medical_tool
```

This should check out the following files to the current directory

```
README: asci versions of this document.
Makefile: Executed project Makefile.
Makefile.linux   alternative linux Makefile.
Makefile.solaris: alternative solaris Makefile.
003_medical_tool.pdf: this document.
tinaTool.c: main tool specification software.
mrimages: subdirectory of example data.
replays: subdirectory of macros.
skeleton.c : code developers starting kit
???.cls : tina replay files (human readable asci)
```

In order to get started you must first build the tinaTool. Copy either the Linux or Solaris to alternative to Makefile (the default is already Solaris). This Makefile may require some manual editing: it assumes that you installed the TINA libraries in the `/usr/local/Tina5` directory, and that you are using the Xview widget set. Open the Makefile in an editor, set the `TINA-X-GUI` variable to specify the widget set you wish to use, and edit any paths that do not apply for your system. Finally, type “make” to build the tinaTool executable.

In order to run the demonstrations please follow the instructions in the README file, located in the tinaTool directory.

## 3 Usage

### 3.1 Graphics

Refer to the Tina Users Guide for information regarding installing and operating general purpose graphics panels (Tv's). The TINA vision demonstration makes use of a variety of Tv's for image display. These can be interchanges and replaced as necessary, for example; Click on "New Tvtool" in the top level tinaTool window to start a new Tvtool to display this graphics stream, then click on "left" in the Tv list of the Stereo tool, and finally "install" in the Tvtool window. The Tvtool will now display any "left" stereo images loaded into the Stereo tool. The macro's will generally perform these steps for you.