

The mini-MIAS database of mammograms

Pilot European Image Processing Archive

The PCCV Project: Benchmarking Vision Systems

Overview
Tutorials
Methodology
Case studies
Test datasets
Our image file format
HATE test harness



Information

General links
Conferences
Mailing lists
Research groups
Societies

Techniques (CVonline)
Software
Image databases

Other stuff

Linux on ThinkPad

By popular request, the original MIAS Database (digitised at 50 micron pixel edge) has been reduced to 200 micron pixel edge and clipped/padded so that every image is 1024 × 1024 pixels. You are free to use the database in your scientific research but you must abide by [the licence agreement](#) when using [the imagery](#).

Credits

Organiser:

J Suckling

Truth-Data:

C R M Boggis and I Hutt

Co-Workers:

S Astley, D Betal, N Cerneaz, D R Dance, S-L Kok, J Parker, I Ricketts, J Savage, E Stamatakis and P Taylor

Special Thanks:

N Karrsemeijer

PEIPA Maintainer:

A Clark

Reference:

J Suckling *et al* (1994): *The Mammographic Image Analysis Society Digital Mammogram Database* Excerpta Medica. International Congress Series 1069 pp375-378.

Detailed Information

The follow list gives the films in the MIAS database and provides appropriate details as follows:

1st column:

MIAS database reference number.

2nd column:

Character of background tissue:

F Fatty
G Fatty-glandular
D Dense-glandular

3rd column:

Class of abnormality present:

CALC	Calcification
CIRC	Well-defined/circumscribed masses
SPIC	Spiculated masses
MISC	Other, ill-defined masses
ARCH	Architectural distortion
ASYM	Asymmetry
NORM	Normal

4th column:

Severity of abnormality;

B	Benign
M	Malignant

5th, 6th columns:

x,y image-coordinates of centre of abnormality.

7th column:

Approximate radius (in pixels) of a circle enclosing the abnormality.

There are also several things you should note:

- The list is arranged in pairs of films, where each pair represents the left (even filename numbers) and right mammograms (odd filename numbers) of a single patient.
- The size of *all* the images is 1024 pixels x 1024 pixels. The images have been centered in the matrix.
- When calcifications are present, centre locations and radii apply to clusters rather than individual calcifications. Coordinate system origin is the bottom-left corner.
- In some cases calcifications are widely distributed throughout the image rather than concentrated at a single site. In these cases centre locations and radii are inappropriate and have been omitted.

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mdb001 G CIRC B 535 425 197
mdb002 G CIRC B 522 280 69
mdb003 D NORM
mdb004 D NORM
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mdb007 G NORM

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