



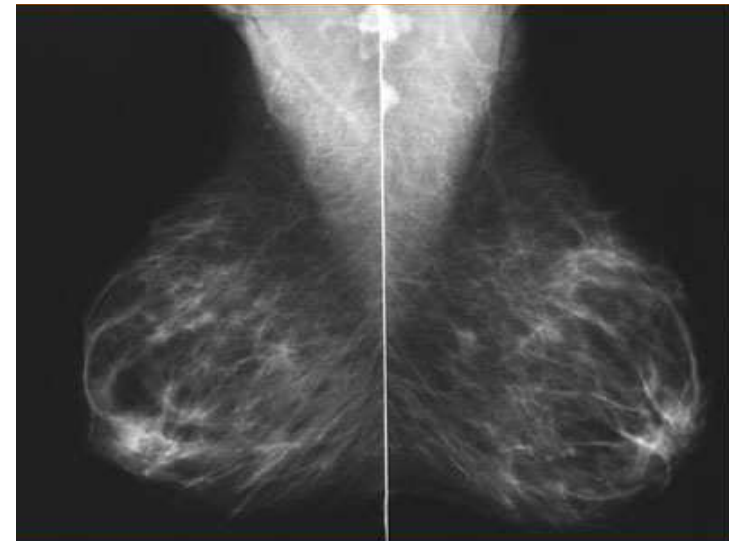
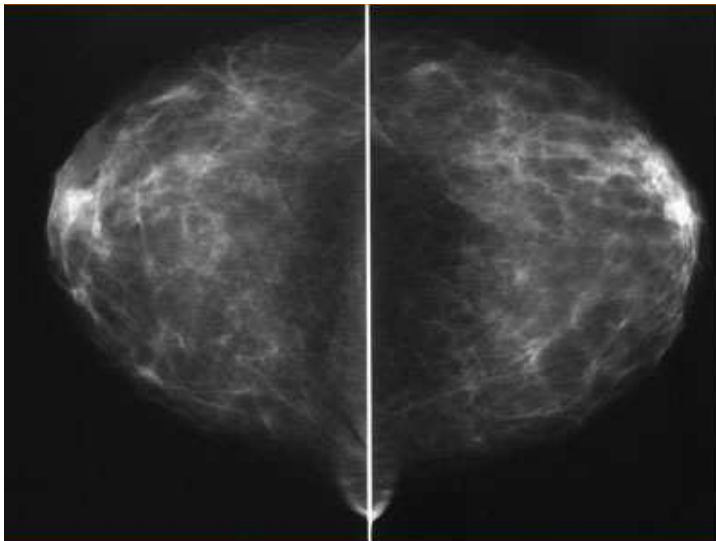
# Medical Image Analysis at the Video Communications Laboratory

**Jelena Božek**  
*jelena.bozek@fer.hr*



# Outline

- Research project
- Project members and collaborators
- Research activities



# Research project

- Intelligent Image Features Extraction in Knowledge Discovery Systems
  - Project is supported by the Ministry of Science, Education and Sports of the Republic of Croatia
  - Web-site: [www.imagefeatures.org](http://www.imagefeatures.org)



# Project members and collaborators



Professor Mislav Grgić  
FER, principal investigator



Marta Mrak, PhD  
BBC R&D, UK



Professor Branka Zovko-Cihlar  
FER



Vedran Klepac, MSc  
HRT - Croatian Radiotelevision



Professor Sonja Grgić  
FER



Mario Muštra, PhD student  
FER



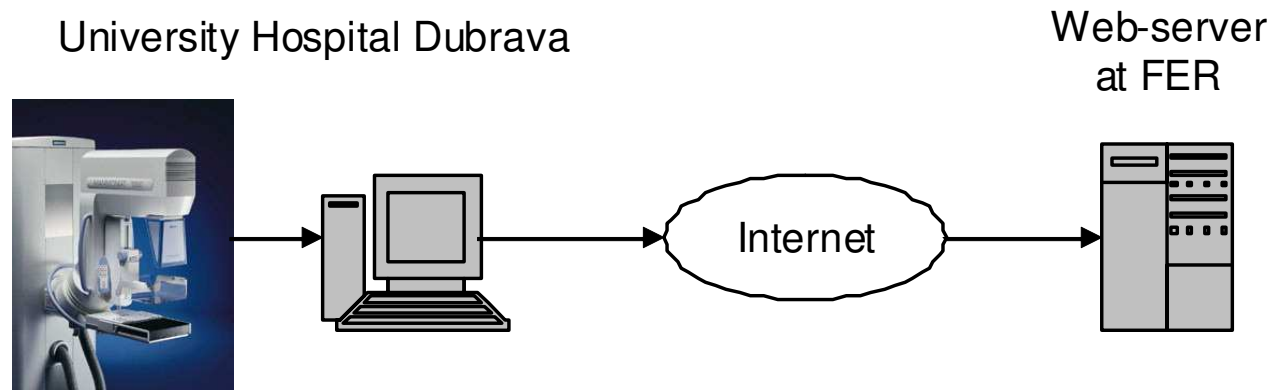
Krešimir Delač, PhD  
Simulus group, Zagreb



Jelena Božek, PhD student  
FER

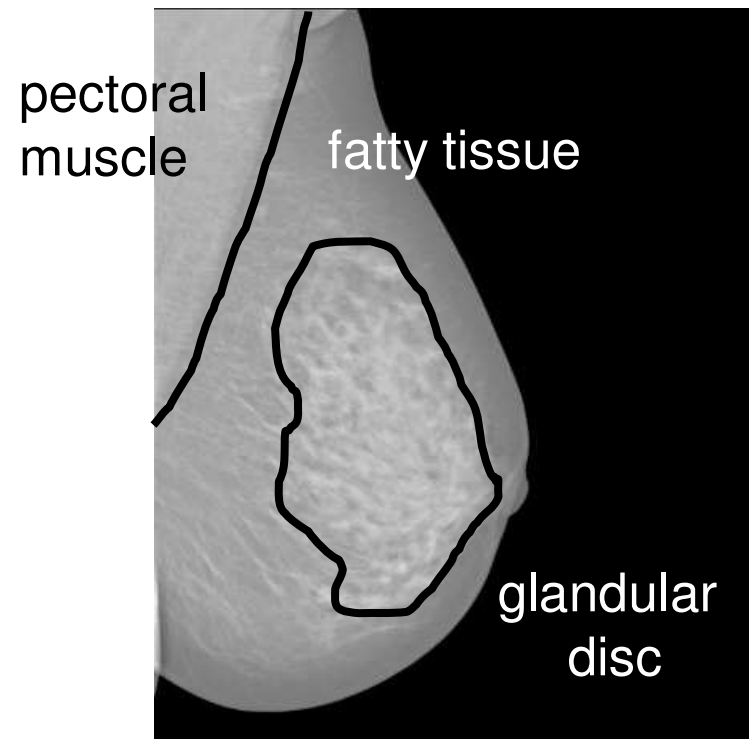
# Research activities

- Mammographic image analysis
- Development of algorithms for computer-aided detection and diagnosis of breast cancer
- Collaboration with the University Hospital Dubrava, Zagreb



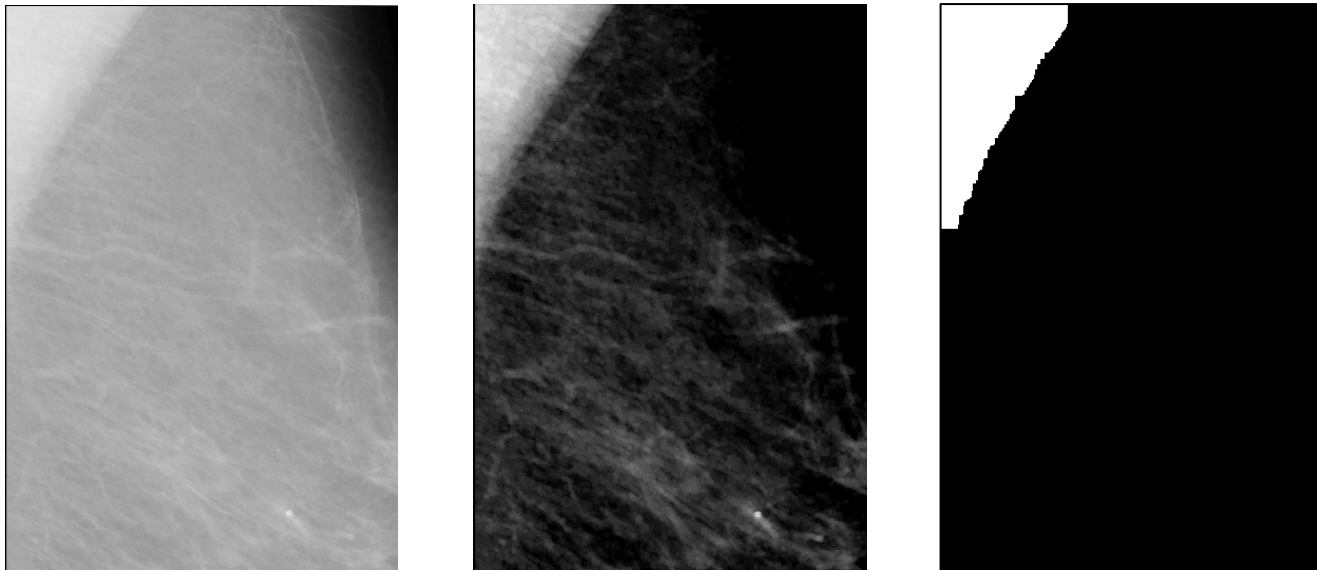
## Research activities

- Mammographic representation of a breast anatomy



# Research activities

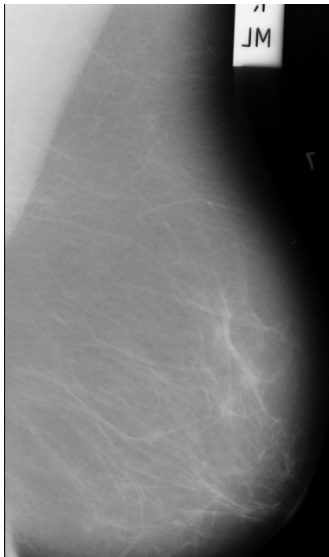
- Mammogram segmentation



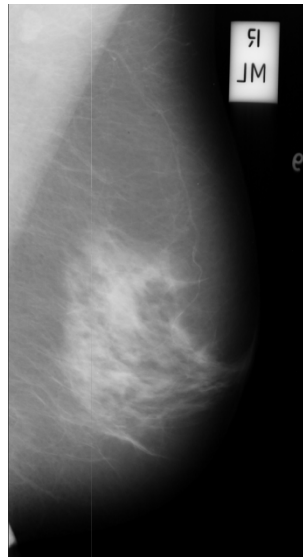


# Research activities

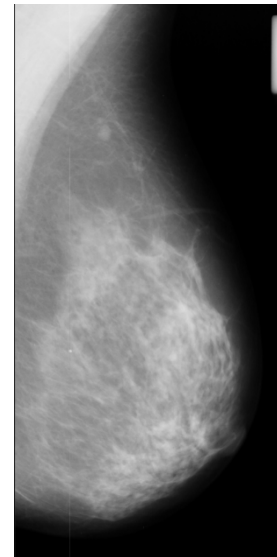
- Automatic breast density estimation



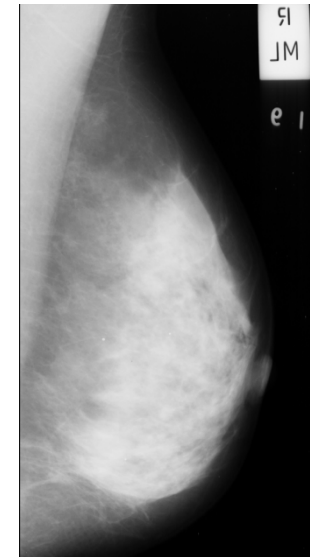
BI-RADS I



BI-RADS II



BI-RADS III

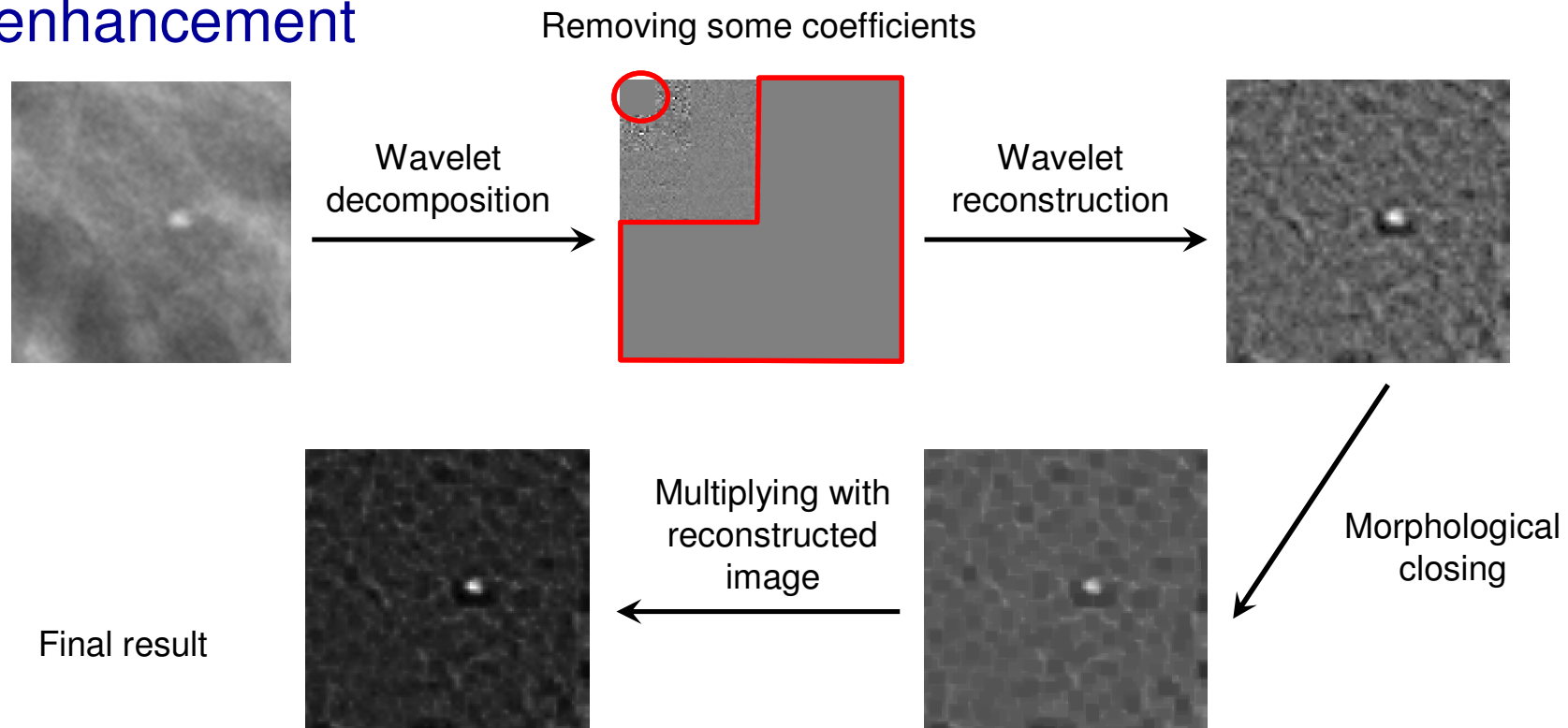


BI-RADS IV



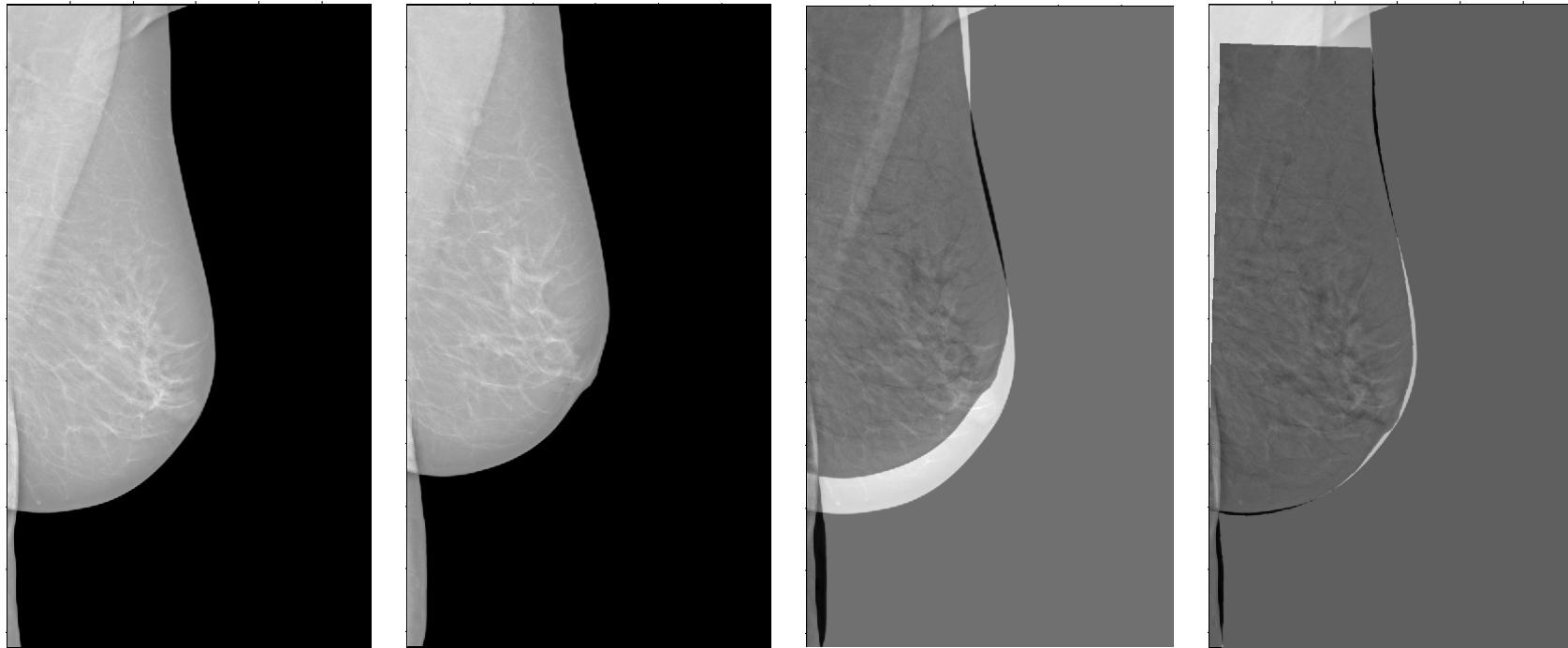
# Research activities

- Detection of microcalcifications using adaptive contrast enhancement



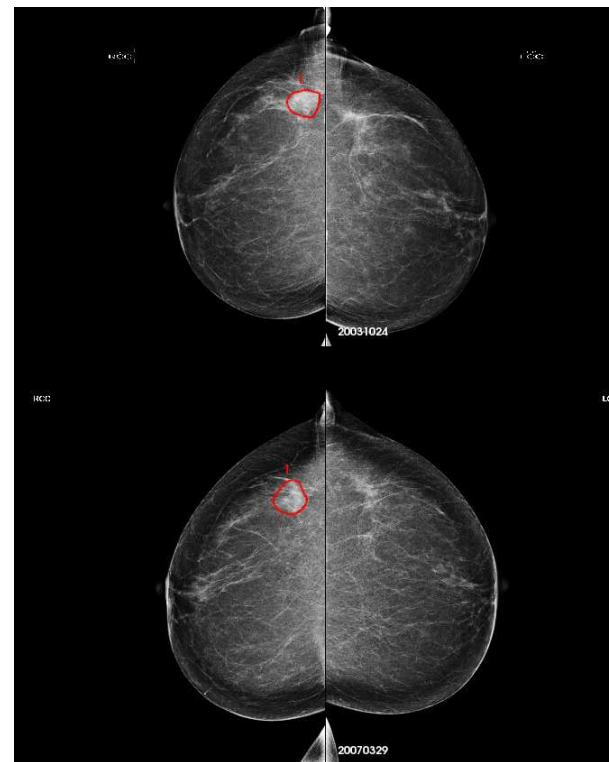
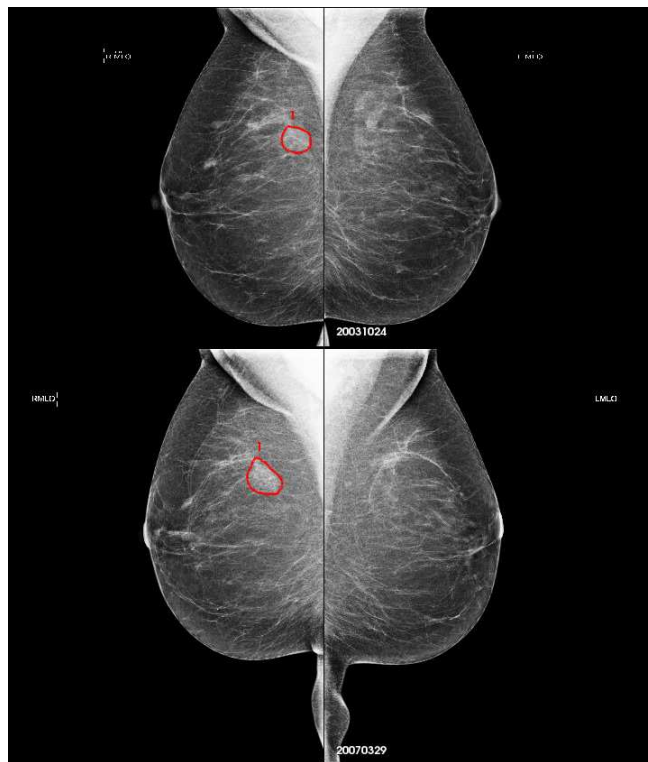
# Research activities

- Bilateral mammogram registration



# Research activities

- Analysis of lesions in temporal digital mammograms





[www.mammoimage.org](http://www.mammoimage.org)