

# BraNet APP MOBIL

## Phase Off-line

## Phase On-line

### Data Collection

#### Mammography

CBIS-DDSM  
mini-MIAS  
Inbreast  
VinDr-Mammo

#### Ultrasound

BUSI  
DATASET A  
UDIAT

### Preprocessing

Data Cleaning  
Data Normalization



ROI annotation (script)

### App Testing

Data Augmentation

**SNGAN**

**CGAN**

ROI segmentation

**Cross-validation**

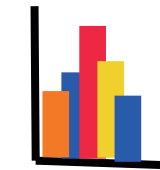
**80% Training** **20% Validation**

ROI classification

**Bening**

**Malignant**

### Evaluation



Precision  
Accuracy  
F1 Score  
Recall  
FID

%

**Expert**



Accuracy

Kappa value

### App Design

System Architecture

- Module 1 Registration
- Module 2 Image load
- Module 3 Image visualization
- Module 4 User ROI extraction
- Module 5 Segmentation (SAM)
- Module 6 Classification (Resnet)