Breast density has been identified as an important risk factor in the development of breast cancer. The purpose of this diploma work was to create software for evaluation mammography images and to allow doctors to study relationships between breast parenchymal density and breast cancer as well as enable monitoring the progress of treatment.

It was created application Mamodens, what contains functions for displaying image records of mammography, tools for image processing and statistical output of measured values.

This application will be used at the Department of Diagnostic Radiology at the General University Hospital in Prague to support diagnostic of the breast cancer.