<u>Presentation of the project content:</u>

The goal of the project is to develop a digital image processing algorithm based on the principle of deep learning. The medical software device is being clinically tested. As a result, an improved methodology for evaluating CT images in the field of imaging diagnostics is being implemented.

The focus of the study is maxillofacial and dentoalveolar surgery. For CBCT images routinely used in this area, the creation of a 3D model suitable for surgical planning takes considerable time. With the solutions currently available on the market, creating 3D model is only possible with lot of human resources (using manual work), which sometimes takes hours.

The algorithm to be developed is universal which capable processing any type of recording depending on the appropriate amount of trained data.