



NEW

## Machine learning classification in US Lymph node scans

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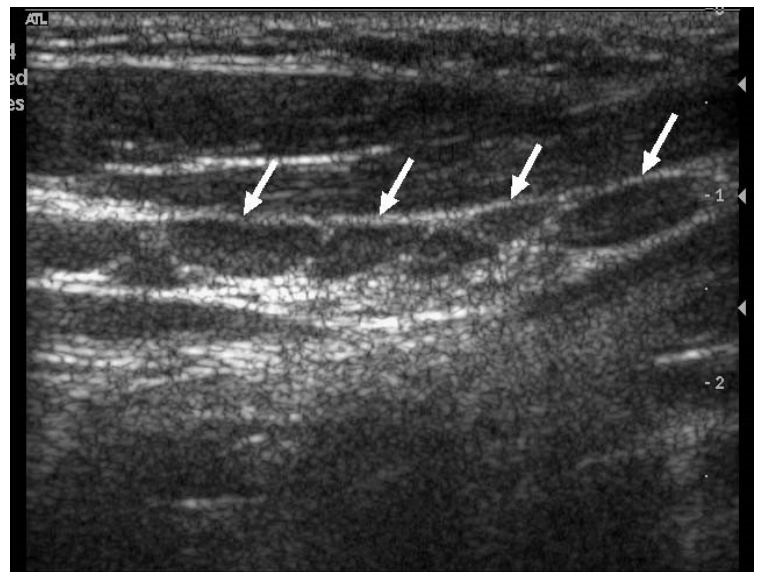
### Project description:

Overgrown Lymph nodes in adults are a strict sign for cancer. For children however, such overgrown nodes are sometimes benign. To assess the state of the Lymph nodes in children, ultrasound scans are being performed and if a suspicion arises, additional invasive scans and PET scans are being done also.

In this project we will develop a machine learning based algorithm for the classification of a benign or malignant tumor in overgrown Lymph nodes in children. The project will consist of the development of a convolutional network in Tensorflow. Based on ultrasound scans and clinical diagnosis, the network will decide the state of the Lymph.

This project has the potential for a better and non-invasive diagnosis of Lymph node cancer in children

This project is a joint collaboration with Rambam



**Required background:** Signal and systems, Mavlas, Mavla.

**Environment:** Python, Tensorflow

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