Super-resolution ultrasound scans of moving microvasculature

**Supervisor:** Oren Solomon

**Project description:**

A new method developed in the SAMPL lab has achieved sub-diffraction resolution in contrast enhanced ultrasound scans with a very fast acquisition rate. Such a method allows for real-time scanning of the microvasculature of moving organs such as the heart or kidney, which until recently was considered impossible.

In this project, we will investigate the application of the method on real clinical data to see if such a method can lead to new diagnosis of patients.

This project is performed as part of a collaboration with Ichilov hospital.

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

**Environment:** Matlab.

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