



FRAUNHOFER INSTITUTE FOR BIOMEDICAL ENGINEERING IBMT



Ultrasound research app for mobile devices



available for
FREE in the
iOS App Store, search
«**Ultrasound Research**»

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Real signal processing on mobile devices

Today mobile computing is gaining more importance in medical imaging. Existing solutions provide visualization based on DICOM image data but Fraunhofer IBMT is raising the bar with **full ultrasound signal processing done on iOS devices** like iPad or iPhone. Based on measurement data of the IBMT ultrasound research platform "DiPhAS" or other rf-data formats the mobile App provides rf-signal processing like tissue characterization and other spectral analysis functions.

The iOS App provides the basic operation of the IBMT «offline analysis tool» for signal analysis, algorithm development and data export. Data from measurements can be transferred using USB file transfer or streamed directly from the beamformer «DiPhAS» to the iPad using wireless WIFI connection.

Flexible research tool based on DiPhAS

One source for this ultrasound rf-data is the modular and scalable ultrasound hardware "DiPhAS" with its open interfaces for device control (unique closed-loop) and data acquisition (radio frequent beamformed data or single element data without beamforming).

Based on the rf data processing we offer the possibility to develop custom algorithms or applications on top of our hardware and software platform with direct support for developed algorithms in the live system. We also provide full medical certification for custom applications based on our platform.

- 1 iPhone and iPod touch App with basic features.
- 2 iPad App with full analysis features.
- 3 DiPhAS mobile cart including beamformer.