

MRTech Services

Machine vision, Embedded systems, Image processing



MRTech offers its customers to develop machine vision solutions that allow them to reach maximum performance for the selected system configuration.

Based on deep understanding of modern cameras and computer hardware, including low-level details, MRTech helps customers of any experience and business sizes to turn their ideas into working systems.

MRTech provides the following services:

- Project study, recommendation on hardware selection and system architecture.
- Software consulting, assistance with integration of MRTech IFF SDK.
- Development of custom image processing applications based on MRTech IFF SDK.
- Customization of processing modules, algorithm implementation.
- Development of custom hardware when necessary.
- Study of project feasibility and prototype development.
- IT consulting and support.

Success story – System customization for 9x7™ Digital Cinema Camera



Product of Pawel Achtel, ACS Australia

Participation in Pawel Achtel's cinema camera project is great example of MRTech service value.

Camera highlights

- 2D and 3D cinema production
- 65 MP images and video
- up to 70 fps in full resolution
- 8 GB/s bandwidth

MRTech SK contribution

- Hardware recommendations
- Prototyping
- Software development and customization
- Stress testing and tech support



Solutions for NVIDIA Jetson platform



MRTech SK develops embedded vision systems with PCIe/USB3/MIPI cameras and NVIDIA Jetson modules, including Jetson Nano, TX2/TX2i, TX2 NX, Xavier NX, AGX Xavier.

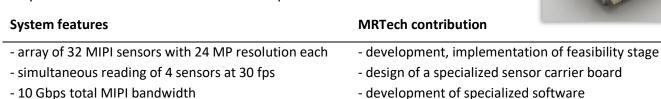
A few examples of this type of solutions are listed below:

- image transmission over network, render on a screen

High-performance acquisition controller based on Jetson AGX Xavier

Target application is a massively multi-sensor system for medical purposes.

Pre-production series of devices has been provided to the customer.



Portable image recording system based on Jetson TX2 module

University medical project with-camera headset for 3D image recording.

The solution has been provided to the customer for further research.

System features	MRTech contribution
- two USB3 cameras	- camera and hardware selection
- Master-slave camera synchronization	- software application development
- 2K image acquisition at 30 fps	- housing design
- H 265 encoding image recording	- system assembling testing



- assembly, testing, delivery of the first series

Low latency streaming device on Jetson Xavier NX

The device is designed to help control a fast-flying drone.

Prototype of the solution has been provided to the customer.

System features	MRTech contribution
- 8.9 MP PCIe XIMEA camera	- camera and hardware selection
- two modes of image acquisition:	- software application development
1080p @ 60 fps or 4K @ 50 fps	 prototyping, testing
- H.265 encoding, RTSP streaming	- tech support

