

`// Data Set Table
vtkTable *datasetTable
datasetTable->AddColumn(xArray);
datasetTable->AddColumn(yArray);
datasetTable->AddColumn(zArray);`

`// Principle Component Analysis Statistics
vtkPCASTStatistics *pcaStatistics = vtkPCASTStatistics::INPUT;
#if VTK_MAJOR_VERSION <= 5
pcaStatistics->SetInput(vtkStatisticsAlgorithm::INPUT);
#else
pcaStatistics->SetInputData(vtkStatisticsAlgorithm::INPUT);
#endif
pcaStatistics->GetComponentStatus("x", 1);
pcaStatistics->GetComponentStatus("y", 1);
pcaStatistics->GetComponentStatus("z", 1);
pcaStatistics->GetSelectedColumns();
pcaStatistics->Accept(true);`

`vectors = vtkDoubleArray::New();
vectors->SetName("eigenvectors");
vectors->Allocate(0, 1);
vectors->Fill(0, 1);
vectors->PrintSelf(std::cout, vtkIndent());`

Creating solutions to help your innovation succeed

CIMTEC's competitive edge is our singular focus on medical imaging technology. Our select group of software and mechanical engineers has extensive research and industry experience, including expertise in image-guided robotic interventions and digital pathology. We know what it takes to bring an imaging innovation to the marketplace.



Make CIMTEC part of your team

CIMTEC develops medical imaging software and hardware

CIMTEC can help you develop the technology associated with your medical imaging innovation to move it along the commercialization continuum.

Specialized skills in medical imaging with extensive industry experience in:

Image Processing 3D Visualization Mechatronics Design

CIMTEC has expertise and intellectual property (IP) focused in image-guided interventions and digital pathology. Our suite of solutions includes cost-effective software and hardware that can be tailored to suit the needs of your project.

Our Technology Development Services:

Image Processing

Customized, clinically-validated image processing algorithms for rapid segmentation, registration and classification.

3D Visualization

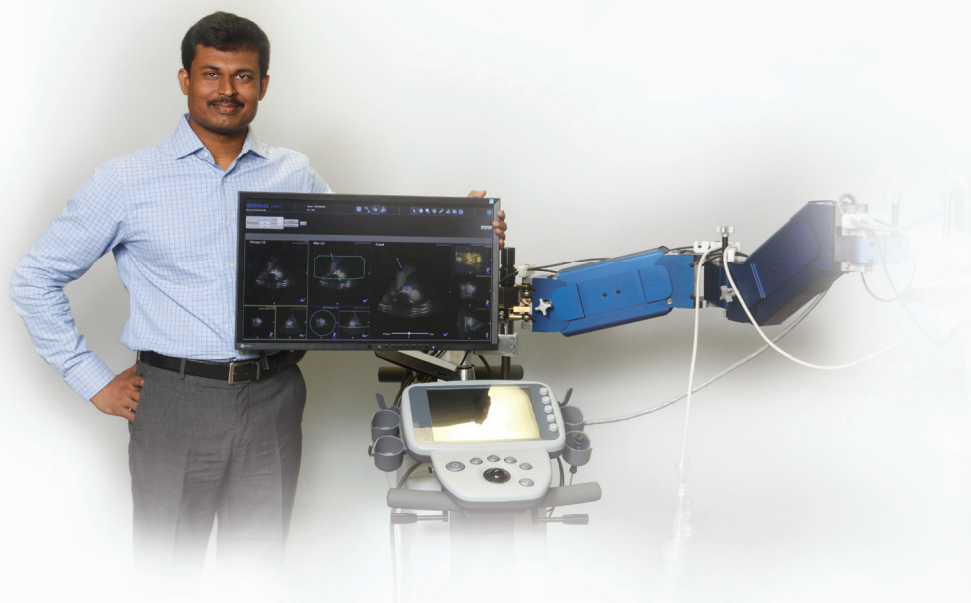
Clinical graphical user interface (GUI) development, multi-modal 3D imaging and real-time quantification.

Mechatronics Design

Design and manufacture of prototypes with expertise in motion control and image-guided interventions.

Systems Design

Ensure that systems integrate smoothly into clinical workflow with attention to training requirements, impacts of pathology process developments and optimizing performance for time savings.



“Once we became aware of the pioneering work in 3D ultrasound in London, ON, we pursued the commercialization expertise of CIMTEC. Its novel image-guidance software modules and robotic system are allowing us to introduce a product that will transform the way liver cancer is managed.”

– Gnanasekar V
Director, New Product Development,
Perfint Healthcare Pvt Ltd.



“CIMTEC offers expertise in image processing and optimization, hardware prototyping as well as clinical testing, providing all the services we require under one roof. Their extremely knowledgeable team is as excited and passionate about moving our project forward as we are!”

– Amol Karnick
CEO, Enhanced Medical

Enhanced Medical is a Canadian startup that is developing and commercializing intellectual property from Isis Innovation, the technology transfer arm of the University of Oxford in the UK.

The technology, called OxEMA, uses a combination of electromagnetic and acoustic waves to enhance ultrasound images with MRI-like information. Its benefits include much greater clarity of image and unparalleled tissue-type characterization at a cost comparable to ultrasound.

The OxEMA system will radically improve identification of tumours and other anomalous tissue enabling earlier diagnosis and more accurate treatment of conditions such as prostate and liver cancer.

Enhanced Medical was looking for a company to assist with prototype development and testing for its first commercial OxEMA system. The company approached CIMTEC because of its commercialization and technology development expertise focused in ultrasound and MR image processing and optimization.

CIMTEC was also a top choice because of its crucial connections to clinicians and laboratories, which allow Enhanced Medical to leverage human trial data using the first commercial system developed through CIMTEC.

Working with CIMTEC is a collaborative process

We will work with you to establish the best approach for your project and develop a plan for achieving project goals. Weekly update meetings will keep your project on schedule and help determine if additional phases of work are required.