



भारत सरकार/Government of India  
स्वास्थ्यऔर परिवारकल्याणमंत्रालय/ Ministry of Health and Family Welfare  
प्रधानमंत्री स्वास्थ्य सुरक्षा योजना/PMSSY  
अखिलभारतीयआयुर्विज्ञानसंस्थान/All India Institute of Medical Sciences  
मंगलगिरि, आंध्रप्रदेश/Mangalagiri, Andhra Pradesh

[www.aiismangalagiri.edu.in](http://www.aiismangalagiri.edu.in)

Ref: File No.: AIISM-ADMN/PROC(CPPP)/50/2025-Procurement AIIMS MG, Date:24-04-2026

## Call for Objection

**Subject:** Inviting comments/objection, if any before declaring proprietary article for procurement of “**Software for 3D anatomical segmentation with Artificial intelligence - Machine learning capabilities**” for the Department of **Anatomy** AIIMS Mangalagiri.

Anatomy Department, AIIMS Mangalagiri has to procure “**Software for 3D anatomical segmentation with Artificial intelligence - Machine learning capabilities**” through Proprietary Article basis.

The proposal submitted by M/s Synopsys International Limited, 4<sup>th</sup> Floor, No. 2, Stemple Exchange Blanchardstown Corporate Park, Blanchardstown, Dublin 15. Ireland. is sole manufacturer and M/s Integrated Microsystem, C-210, C Block, Pocket I, Mayfield Garden Sector 50, Gurugram, Haryana 12208, India. is appointed as authorized distributor for **Software for 3D anatomical segmentation with Artificial intelligence - Machine learning capabilities** are proprietary product.

The above documents are being uploaded for open information to submit objections, comments if any from any manufacturer/supplier before declaring proprietary article of the said equipment/items to be procured, within 10 days (i.e 04-05-2026) from the date of issuance/uploading of the notification.

The objection should be raised in the technical compliance sheet as enclosed in Annexure -I, if any Firm claiming suitability of their product with respect to specification mentioned.

The comments should be sent to the office of Procurement Cell, Room no: 2151, Logistic block at AIIMS Mangalagiri in a sealed envelope with above reference on or before 04-05-2026 up to 05:00 PM from the date of uploading on institutional website, failing which it will be presumed that any other manufacture/vendor is having no comment to offer and case will be decided on merits.

Sd/-  
AAO (Procurement cum Stores)  
AIIMS Mangalagiri

P-3 FORM

(To be attached with P-2 form for Proprietary items)

AIIMS Mangalagiri

PROPRIETARY ARTICLE CERTIFICATE

Software for 3D anatomical segmentation with Artificial Intelligence - Machine learning capabilities (Synopsis Simple ware Research License) tool is an Image processing, Segmentation, CAD Import formats, Meshing (FE), CFD Model, NURBS Geometry, Design Link (Linking license for SolidWorks), Auto segmentation (AS Ortho and Cardio) tools: (Hip/Spine/Ankle/ Knee/CMF/Cardio) with Perpetual license.

To the best of our knowledge, Synopsis' SimpleWare software is the sole developer of this kind of software.

Similar items manufactured by other firms will not be suitable for 3D image processing, segmentation, computational modelling, and research analysis related to the intended use because the necessary modules and tools have been developed exclusively by Synopsis International Limited and Integrated Microsystem.

  
Sign of Indenter **डॉ.वाई.अनिल कुमार रेड्डी**  
Designation **Dr. Y. ANIL KUMAR REDDY**  
सह प्राध्यापक / Associate Professor  
Department **शरीर रचना विज्ञान विभाग / Department of Anatomy**  
एम्स मंगलगिरी / AIIMS Mangalagiri

Recommendation:

Signature of Head of Department /Section

N.B. : The indenter before recording the above certificate should satisfy himself that the article is genuinely of proprietary nature manufactured under patent laws.

# SYNOPSYS®

**Synopsys International Limited**  
4<sup>th</sup> Floor, No. 2, Stemple Exchange  
Blanchardstown Corporate Park,  
Blanchardstown,  
Dublin 15, Ireland

Date: 11 September 2025

**Ref: Certificate of Representative**

Dear Sir/Madam,

Subject to all terms and conditions in the Partner Agreement (Agreement number Q-70028611 dated August 25, 2025, signed by and between Synopsys International Limited and Integrated Microsystem, we hereby certify the following:

Integrated Microsystem is our distributor authorized to represent Synopsys International Limited for the sales of Synopsys Products as set forth in the Articles listed below, herein to your organization in India.

IMS is located at  
C-210, C Block, Pocket I, Mayfield Garden,  
Sector 50, Gurugram, Haryana 12208, India.

Synopsys hereby also certify that the Articles listed below are proprietary items of Synopsys Inc., or its subsidiaries ("Synopsys").

This Certificate will be deemed valid from the date of signature below for a period of 1 year and Synopsys reserves the right to withdraw this certification at any time. Please contact your Synopsys representative Mubarak Zhad zhad@synopsys.com for any question related to such validity.

Only the formally signed version of this Certificate will be deemed valid.

**Annex:** Synopsys Product List eligible for sales by IMS.

**Signature:** *Orla Murphy*  
**Synopsys International Limited**

Orla Murphy

Printed Name  
Director

Title  
11 September 2025

Date

APPROVED BY SYNOPSYS LEGAL DEPT.  
P. YO

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Page 1 of 2

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*Dr. Joy A. Ghoshal*  
-10/2/26  
**Dr. JOY A. GHOSHAL**  
HOD Anatomy  
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Annex

Synopsys Product(s) List eligible for sales

Product Category	Limitations
EDAG	Excluding LCA, DeEmphasized and Export Controlled Products. Perpetual License model available only to government customers and sold with 1-year software maintenance, subject to Synopsys written approval
DWC IP	Advanced IPs (technology process lower than 16nm) requires written approval from SNPS. Excluding LCA / De-Emphasized / Foundry and Export restricted IPs
TCAD (only for Material 4458-0 and 9499-0)	For academic end users only
ACE and eLearning Courses	Refer to prices as shown in <a href="https://training.synopsys.com/learn">https://training.synopsys.com/learn</a>

Product Code	Product Description
C001-0	Simpleware ScanIP Academic
C002-0	Simpleware FE Academic
C003-0	Simpleware CAD Academic

Product Code	Product Description
I512-0	Simpleware Medical Base
I513-0	Simpleware Medical Elite
I514-0	Simpleware Medical Apex
I515-0	Simpleware Base
I516-0	Simpleware Elite
I517-0	Simpleware Apex
I518-0	Simpleware Research (available only to non-commercial user)

Product Code	Product Description
C760-0	QuantumATK + NEGF Govlab
C763-0	QuantumATK + NEGF Academic



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## Specification of Software for 3D anatomical segmentation with Artificial intelligence - Machine learning capabilities

### Specifications - Software for 3D anatomical segmentation with Artificial Intelligence - Machine learning capabilities

Software should have following features:

- Easily process 3D & 4D medical image data (DICOM) with extensive segmentation and meshing tools (Import, Visualize, Cine Modes...)
- Import and anonymize patient DICOM tags from PACS server (DICOM 3.0 compliant) to ScanIP.
- Combine CAD and imaging data for patient-specific analysis
- DICOM Encapsulated STL/OBJ Format
- Rapidly segment and process medical images with easy-to-use interface
- Obtain reliable data for complex anatomical analysis using measurement and statistics tools
- Software should be CE Marked and FDA (510k) Cleared
- Import and Register 2D X-Ray Images and Generate Virtual X-Rays
- Export geometrically accurate models for pre-surgical planning
- Accurately analyze and measure anatomies
- Improve surgical planning by building reliable models
- Export Encrypted 3D PDF Files
- Comply with privacy standards for handling patient data
- Take advantage of exclusive features designed specifically for clinical applications
- Speed up compliance processes by integrating certified software into your workflows
- Trust in software that has gone through rigorous compliance processes
- The software's functionality can be accessed using an integrated scripting interface, using Python and C# languages.
- Macro recording and a log history converter can also be used to automate steps, as well as using the scripting API to write and edit scripts.
- Conversion of mask to surface models and export into various formats such as .stl, .obj, .xyz, etc.
- Centerline editor tool that is present in ScanIP to create a centerline for whole model to identify geometric information of anatomy that we are working on.
- Visualize and explore data in 2D and 3D
- Use medical orientation overlays
- Use semi-automated and automated tools for medical image segmentation
- Identify regions of interest using semi-automated tools
- Generate animations
- Measure airways and vessels, place landmark points
- Compute range of statistics (volume, surface area, material properties, average greyscale...)
- 3D printing toolkit – Prepare models generated from image data for 3D printing.

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- Smart mask smoothing – volume and topology preserving smoothing algorithm that can be applied on single or multiple parts.
- Fully automated orthopedic segmentation solution using AS Ortho: One-click solution to eliminate hours spent on tedious manual processes.
- Fast and effective: Get results in 1 – 3 minutes on a standard engineering specification laptop.
- Accurate and reliable: Simpleware ML algorithms are trained by experts and verified by clinical professionals.
- Secure: Protect your patient data on your local hardware, avoiding the need to transfer confidential data onto servers outside of your control.
- Consistent and repeatable: Eliminate inconsistencies between users and need for multiple reviews.
- Scalable: Boost your throughput, and efficiently process large numbers of datasets 20 – 50 times faster.
- Less Segmentation - More Innovation: Free up engineering time for more complex and high-value tasks.
- AS Ortho/ AS Cardio modules to be included
- The Ankle CT tool explores a new anatomy as part of Synopsys' offering to the Orthopedic community. This tool automatically segments the bones in the ankle joint, including the Talus, Calcaneus, Tibia, and Fibula from CT image data. It also automatically places anatomic landmarks on the ankle center, fibular notch as well as the lateral and medial malleolus.
- The Knee CT tool compliments the existing Knee MRI tool for those working to create knee models from image data. This tool automatically segments the bones in the knee joint including the Femur, Tibia, Fibula, Patella and Fabella if present from CT image data. In addition to the segmentation the tools, this approach also automatically places an extensive range of anatomic landmarks on the bones segmented.
- Like all Simpleware AS Ortho tools, Ankle CT and Knee CT include the ability to define and automatically detect specific regions of interest. The tools can also be fully scripted (along with features from Simpleware ScanIP) using Python or C# to integrate into your pipeline, including batch import and processing, with subsequent model export or result sharing – Simpleware AI solutions fit seamlessly within your wider workflows.
- **CT of the Pelvic Region:** extract the Femurs, Hip (left and right) and Sacrum with a range of medical landmarks generated including: Greater and Less Trochanter, Pubic Tubercles, Anterior and Posterior Superior Iliac Spine, and the Coccyx.
- Fully automated cardio solution using AS Cardio for Heart Segmentation and Landmarking
- Anatomy-specific automated segmentation tool for heart blood pool and muscle
- Automatic segmentation suitable for use on CT scans
- Produces masks for: – Aorta, Left Atrium, Left Coronary Artery, Left Ventricle, Myocardium, Pulmonary Artery, Right Atrium, Right Coronary Artery, Right Ventricle

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- Landmarks placed on identified anatomy: – Aortic Commissure (1, 2 and 3), Aortic Coronary Cusp (left, right, and posterior), Aortic Coronary Ostium (left, right), Atrial Appendage (left, right), Coronary Sinus Ostium Centroid, Left Ventricle Apex, Left Ventricle Base, Right Ventricle Apex, Tricuspid Valve Centroid, Vena Cava Ostium Centroid (inferior, superior).
- Segmentation and landmarking available for 3D and 4D frames
- Automatic ROI detection within larger extent scans


**Tools should also include: –**

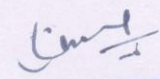
- Heart Valve Analysis
- Analysis tool streamlining the workflow for computing characteristics of Aortic Valve, Mitral Valve, Tricuspid Valve or Pulmonary Valve.
- Fit planes through Cusps (Aortic Valve only)
- Measure distance to Ostia (Aortic Valve only)
- Fit plane through Annulus (all)
- Centerline analysis (Aortic and Pulmonary Valves): –  
Aortic Valve: centerlines created for the Ascending Aorta, and shapes generated representing best fit circles for the Sinotabular Junction, Sinuses of Valsalva and Tubular Ascending Aorta  
Pulmonary Valve: the outputs include centerlines created for the Pulmonary Trunk and left/right Artery

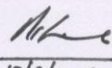
**General User Interface**

- Interactive anatomy diagrams indicate the expected output, if anatomies are present and identifiable in the input data
- Histogram and profile line utilities assist in finding optimal threshold values
- Toggle the segmentation of each available anatomy
- Toggle the generation of landmarks
- Landmarks accessible via the Measurements tool
- Reduce region of interest to a sub-volume of a larger extent scan, either automatically or manually
- PACS: two-way PACS communication, configure access (servers, ports, keys etc.)
- Independent part visibility control in 2D and 3D
- Keyboard shortcuts: set user-defined shortcuts to commands or tools to customize and speed up repeated workflows
- Ability to import multiple images sets into the workspace to aid segmentation

  
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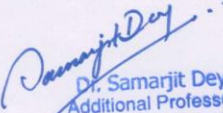
  
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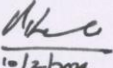
**Other terms and conditions:**

- License should be perpetual/ long term in nature.
- Desktop / Laptop with supported Operating system having higher configuration for hassle-free operation of supplied software (64-bit, Windows 11 licence, MS Office license, Processor: Intel Core i7 or equivalent, Memory (RAM): 16 GB or higher\*\*, Graphics card: Workstation grade OpenGL 3.2 compatible graphics card with 1024 MB VRAM\*\*\*, Screen resolution: 1920 x 1080; True color (32bit) or more, SSD 400 GB minimum and CUDA-enabled NVIDIA graphics card with a minimum compute capability of 5.2 and a maximum of 8.x. In addition, a minimum of 4GB VRAM is required.)
- Three pieces of SSD hard disk with capacity of 1 TB each for storage of raw and segmented data.
- Officer furniture: Computer table and workstation (L shaped).

  
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**Specification of Software for 3D anatomical segmentation with Artificial intelligence -  
Machine learning capabilities**

**Objection should be submitted in following format:**

<b>S. no</b>	<b>Item specification as given</b>	<b>Specification offered by firm</b>	<b>Deviation if any</b>	<b>Remarks</b>

Please submit the updated P3 form along with a valid GeM non-availability certificate for further processing.