



ORSI SURGICAL AI & TELESURGERY DAYS 2025 – POWERED BY SRS

Revolutionizing surgical practice with
artificial intelligence

FEBRUARY 27 – MARCH 1, 2025

OUDE VISMIJN

Ghent, Belgium

www.surgicalaidays.com

EUROPEAN
PLATFORM FOR
AI ACROSS
SURGICAL
DISCIPLINES

DAY 1 | Feb. 27 | Lectures

VENUE | Oude Vismijn

08:30 – 10:00 | Session 1: Surgical AI – 101

Chairs: Yoav Mintz, Andrew Gumbs

- What is Surgical AI? *Oz Meireles*
- The 2025 status update of intraoperative applications *Amin Madani*
- Predicting patient complications and outcomes *Felix Nickel*
- The robot knows it all – do's & don'ts of robotics signal processing *Filippo Filicori*
- Data is the new oil: why multicentricity, ontology and annotation quality matter *Jennifer Eckhoff*

10:00 – 10:30 | Break

Poster session and industry exhibit

10:30 – 12:00 | Session 2: Surgical Scene Understanding

Chairs: Ivo Broeders, Pieter De Backer

- The issue is the tissue – semantic segmentation *Fiona Kolbinger*
- Timing is everything – phase recognition *Marco Mezzina*
- 3D is the new 2D - stereoreconstruction *Mathias Unberath*
- Pushing the role of fluorescence through AI *Ronan Cahill*
- Augmenting our human visual bandwidth – hyperspectral imaging *Daniel Elson*

12:00 – 13:00 | Industry session: Commercial Surgical Data Science Today

Dependent on sponsoring

13:00 – 14:00 | Lunch

Poster session and industry exhibit

14:00 – 15:30 | Session 3: Going beyond Vision only

Chair: Niki Rashidian, Federica Ferraguti

- The guide to capturing data in your OR *Ivo Broeders*
- Context aware ORs and the tactile internet
- Vision Language Models *Vinkle Srivastav*
- Ultrasound and robotic surgery – is AI the missing connector?

15:30 – 16:00 | Break

Poster session and industry exhibit

16:00 – 17:30 | Session 4: Surgical robotics as a key platform for advancements in digital surgery

Chairs: Yoav Mintz, Filippo Filicori

- Overview of commercially available AI driven surgical robots
- Why do we need AI for autonomous surgical robotics
- Where is the industry going with AI and soft tissue robotics *Steve Bell*

20:00 | Faculty dinner @ Pillows Hotel

ROOM 1

08:30 – 10:00 | Session 5: Synthetic data & Surgical teaching

Chairs: Jaap Bonjer, Manhendra Bhandari

- Synthetic data *Dan Stoyanov*
- Use of large language models for surgical AI *Sem Hardon*
- Surgical simulation *Pieter De Backer*
- Surgical assessment

10:00 – 10:30 | Break

Poster session and industry exhibit

10:30 – 11:30 | Session 6: What can we learn from KOLs in other domains?

Chairs: Axel Krieger

- Autonomous driving
- Agriculture
- AI Hardware foundations that bridge across industry domains *Mahdi Azizian - NVIDIA*

ROOM 2

08:30 – 10:00 | Session 7: AI as enabler for Telesurgery

Chairs: Vipul Patel, Alex Mottrie

- Introduction to telesurgery *Barbara Seeliger*
- Current state of telesurgery *Vipul Patel*
- Network connectivity for telesurgery *Mischa Dohler*
- Telesurgery collaborative working group *Marcio Moschovas*
- AI infrastructure for telesurgery challenges

10:00 – 10:30 | Break

Poster session and industry exhibit

10:30 – 12:30 | Session 8: AI and Telesurgery panel discussion (hosted by SRS): quo vadis?

Chairs: Steve Bell, Alberto Breda

- Who is responsible in case of technical failure
- What is required on a regulatory level to implement telesurgery?
- Teaching and training through telesurgery *Alex Mottrie*
- Ethical considerations of telesurgery

DAY 2 | Feb. 28 | Lectures

VENUE | Oude Vismijn

12:30 – 13:30 | Lunch

- Lunch session: Telesurgery demo with Orsi Academy from event location
- Poster session and industry exhibit

13:30 – 16:00 | Session 9: AI powered live surgeries

Channel 1

- Live robotic partial nephrectomy with AI and AR analysis
OLV Aalst – Ruben De Groote
Moderated by Bernardo Rocco & Niki Rashidian
- Radical prostatectomy with AI copilot
OLV Aalst – Alex Mottrie
Moderated by Marcio Moschovas & Mahdi Azizian

Channel 2

- Live lung segmentectomy with AR overlay
UZ Leuven – Yanina Jansen
Moderated by Nuria Novoa & Amir H. Sadeghi
- Live total knee prosthesis
AZ Delta – Thomas Luyckx
Moderated by Martin Roche

16:00 – 16:30 | Break

Poster session and industry exhibit

16:30 – 17:30 | Session 10: Panel discussion: Crosspollination across surgical disciplines & the role of surgical societies

- Urology *James N'Dow*
- Gynaecology *Martin Martino*
- Upper GI *Sharon Ross*
- Colorectal *Eduardo Parra*
- Flexible endoscopy *Silvana Perreta*
- Orthopedics *Martin Roche*
- Endovascular surgery *Isabelle Van Herzeele*
- Cardio-thoracic *Franca Melfi*

17:30 – 18:00 | Session 12: Best abstract presentation *Niki Rashidian*

08:30 – 09:00 | Arrival and welcome at Orsi Academy

HANDS-ON WORKSHOP: SESSION 1

1h30 | How to start with surgical AI (annotation & recording)

Jente Simoens

1h30 | How to train a computer vision network

Marco Mezzina

HANDS-ON WORKSHOP: SESSION 2

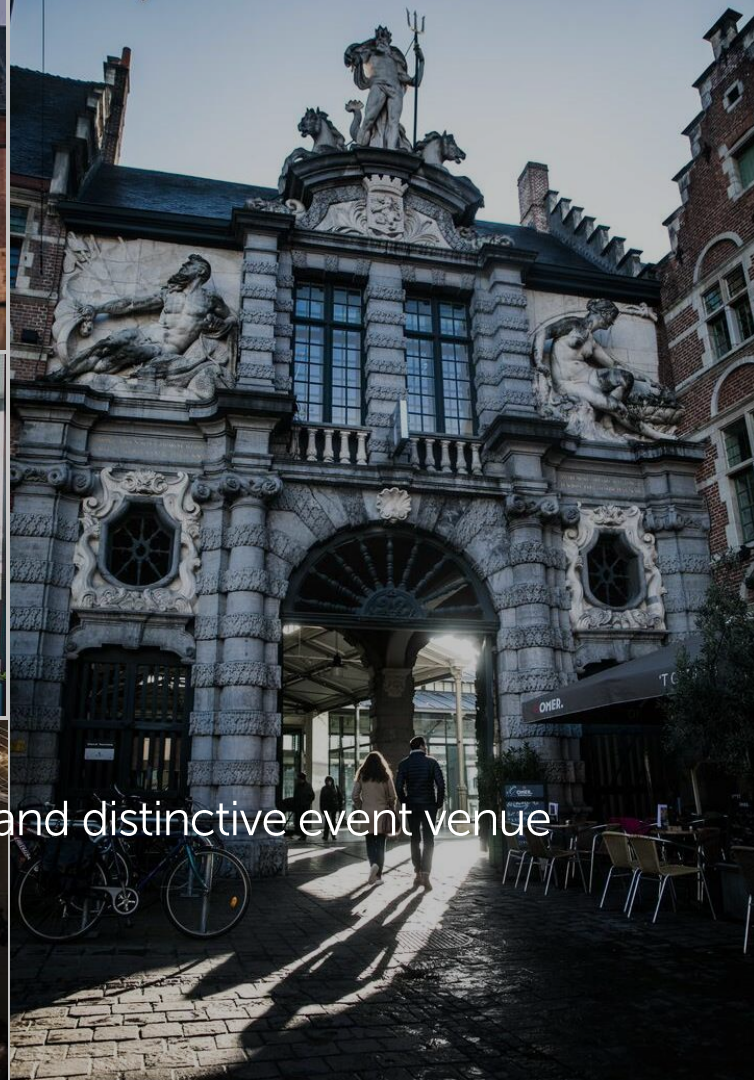
1h00 | Hands-on reading out signals for the operating systems

2h00 | Rotations and hands-on explications

- Orsi demo on AR and anonymization
- Nvidia demo station
- Demos of researchers/universities/companies
- AI demos

Attendees will be divided into 2 groups that switch sessions.

17:00 | End of the hands-on workshops



The oldest market in the heart of Ghent, a unique and distinctive event venue

Venue | Oude Vismijn



Where modern design meets an elegant Louis XIV interior

Faculty hotel | Pillows****



We look forward to welcoming you
to the second edition of
the Surgical AI & Telesurgery Days 2025
- Officially powered by the Society of Robotic Surgeons!

Surgical AI & Telesurgery Days | Feb.27 - Mar.1, '25 | www.surgicalaidays.com | surgical.ai@orsi.be