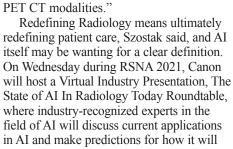
#### **INDUSTRY FOCUS**

# **True Neural Network Thinking Defines AI Reconstruction**

By Evonne Acevedo

When radiologists look for artificial intelligence (AI) applications to enhance their performance and efficiency, they want more than automation — they want a solution that's trained to think.

"Medical imaging continues to evolve to meet the needs of providers who ask for better resolution and shorter scan times with lower dose," said Tom Szostak, Director of Healthcare Economics at Canon Medical Systems USA, Inc. "We've tailored our AI solutions to address those needs by developing powerful applications that can be used on up to 98% of all procedures delivered on our CT, MR and PET CT modalities."



be enmeshed in real-world clinical care.

"AI can be confusing to discuss with customers, because every automated solution can be described as AI," Szostak said.

"At Canon we define AI to be deep learning or machine learning — your true neural network thinking. Not just an 'if this, then that' statement, but human-like thinking that goes beyond one specific use case."

For example, Canon's AiCE deep learning reconstruction system can differentiate signal from noise, so that the algorithm can suppress noise while enhancing signal. It's trained with model-based iterative reconstruction (MBIR) to exhibit high spatial resolution — but unlike MBIR, it overcomes



Szostak

challenges with image appearance or reconstruction speed that can present in a clinical setting.

Canon set out to make these solutions not only meaningful for radiologists, but also accessible for all imaging studies. Rather than offering AI applications as a segmented or "premium" addon, they build the technology into the products. "Our AiCE is available across our entire CT portfolio, so you choose any CT system and you have access to

that technology. Same with MR and digital PET CT," Szostak explained.

Also during RSNA, Canon will unveil its new "Altivity" AI solution. Under the promise of Intelligent healthcare made easy, Altivity enables:

#### **Informed healthcare**

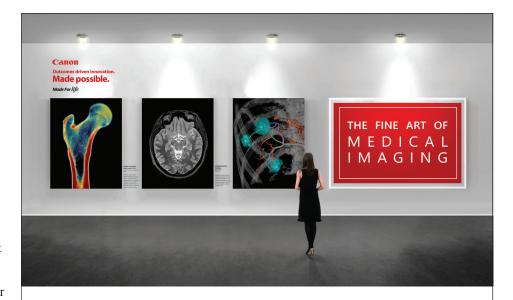
Altivity is here to help enhance clinical confidence with high-quality images and applications that help make informed decisions in real-time.

#### Fast, tailored care

Altivity has been created with patients in mind, to deliver the fast and accurate results they need for a more personalized treatment approach.

#### **Efficient workflows**

Altivity helps create simple, streamlined AI-driven workflows that optimize resource deployment and ensure your teams have the insights they need to work smarter every day.



Canon Medical is proud to present our **2021 RSNA Virtual Exhibit**. This one-of-a-kind experience will provide the latest updates on the outcomes driven innovations shared at this year's RSNA. Consistent with our Made for Life Philosopy, we are excited to extend our invitation to meet with Canon Medical experts to those attending RSNA in-person as well as our valued customers that will not be traveling this year.



#### Visit our RSNA virtual gallery today!

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us.medical.canon

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"Technology and innovation don't matter if you don't have access to them," Szostak said. "With the entire product portfolio enabled with an amazing, innovative solution for each modality, we can assist providers to deliver more efficient, cost-effective, high-quality patient-centered care that is safe and meaningful."

Find Canon Medical Systems' virtual booth at *Meeting.RSNA.org*.

## **Experience the World's Largest Medical Imaging Exhibition**

Visit the RSNA 2021 Technical Exhibits Halls, featuring more than 500 leading manufacturers, suppliers and developers, to explore the latest medical imaging products and services all in one place

In the AI Showcase, discover the latest in artificial intelligence (AI), connect with industry experts and see what's happening in the RSNA AI Theater. Experience the Imaging AI in Practice Demonstration featuring AI tools in use in real-world clinical scenarios.

You'll find many focused areas in the Technical Exhibits Halls including the 3D Printing and Mixed Reality Showcase, Recruiters Row and Educators Row. While in Recruiters Row, update your headshot at the RSNA Portrait Studio.

Connect with representatives from educational institutions and medical associations from around the world at Educators Row where you can also meet with RSNA pub-

lications staff. Then, head to the First-Time Exhibitor Pavilion to meet with more than 90 annual meeting newcomers.

Our Technical Exhibits Halls feature demonstrations and learning opportunities throughout the day. Learn about radiology's latest innovations in the Innovation Theater. Participate in Corporate Symposiums, attend Vendor Workshops or participate in Lunch & Learns that include panel discussions, demonstrations and lectures.

Don't miss the chance to explore our Virtual Exhibition to connect with exhibitors who were unable to travel to Chicago. All RSNA attendees have access to industry programming and the complete Virtual Exhibition through April 30, 2022. And, visit the Virtual Exhibitor Lounge to learn more about our virtual-only exhibitors.

Learn more about the RSNA 2021 Technical Exhibits at *Meeting.RSNA.org*.

### **Technical Exhibits At-A-Glance**

#### **Technical Exhibits Hours**

Sunday – Wednesday 10 a.m. – 5 p.m. South Hall A, Level 3 North Hall B, Level 3

#### **Al Showcase**

South Hall A, Level 3 (starting at Booth 4129)

#### 3D Printing & Mixed Reality Showcase

North Hall, Level 3 (starting at Booth 8100)

#### **Imaging AI in Practice Demonstration**

South Hall, within the Al Showcase Booth 4529

#### **Virtual Exhibitor Lounge**

South Hall A, Level 3, Booth 4112

#### **RSNA AI Theater Presentations**

South Hall, Booth 5147 Sunday – Wednesday 10:30 a.m. – 3:45 p.m.

#### **Innovation Theater Presentations**

South Hall, Level 3, Booth 4108 Monday and Tuesday 10:30 a.m. – 3:45 p.m.

## Vendor Workshops, Lunch and Learns and Corporate Symposiums

See Meeting Program for schedules

## Virtual Exhibition and Virtual Industry Presentations

See Meeting Program for schedules

#### Dining:

RSNA Bistro
South Hall and
North Hall
Sunday — Wednesday
Buffet lunch served
11 a.m. — 2:30 p.m.

