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RSNA Press Release

RSNA Launches Radiology: Artificial Intelligence

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OAK BROOK, Ill. (Jan. 30, 2019) — The Radiological Society of North America (RSNA) today published the first issue of its new online journal *Radiology: Artificial Intelligence*.

Held to the same high editorial standards as *Radiology*, this new journal highlights the emerging applications of machine learning and artificial intelligence in the field of imaging across multiple disciplines.

"We are extremely pleased with the quality of articles in the journal's first issue," said editor Charles E. Kahn Jr., M.D., M.S., professor and vice chairman of radiology at Perelman School of Medicine and senior fellow of the Institute for Biomedical Informatics and the Leonard Davis Institute of Health Economics at University of Pennsylvania. "These articles highlight the ways that AI can be applied to measurably improve healthcare."

Included in the first issue are:

- "Artificial Intelligence and Real Radiology" by Charles E. Kahn Jr., M.D., M.S.
- "Augmented Radiology: Looking Over the Horizon" by Christie M. Lincoln, M.D., et al.
- "Augmenting the NIH Chest Radiograph Dataset with Expert Annotations of Possible Pneumonia" by George Shih, M.D., et al.
- "Challenges Related to Artificial Intelligence Research in Medical Imaging and the Importance of Image Analysis Competitions" by Luciano M. Prevedello, M.D., M.P.H., et al.

Original Research:

- "Combination of Active Transfer Learning and Natural Language Processing to Improve Liver Volumetry Using Surrogate Metrics with Deep Learning" by Brett Marinelli, M.D., et al. *Surrogate metrics and active transfer learning can facilitate the deployment and validation of deep learning–based segmentation methods on clinical datasets.*
- "Convolutional Neural Networks for Automated Fracture Detection and Localization on Wrist Radiographs" by Yee Liang Thian, M.B.B.S., FRCR, et al. *Deep learning object detection networks can be trained to accurately detect and localize fractures on wrist radiographs.*
- "Binomial Classification of Pediatric Elbow Fractures using a Deep Learning Multiview Approach Emulating Radiologist Decision Making" by Jesse C.

Rayan, M.D., et al. *Deep learning can effectively classify acute and non-acute pediatric elbow radiographs in the setting of trauma.*

The new journal invites high-quality manuscripts illustrating the use of AI to diagnose and manage patients, extract information, streamline radiology workflow, or improve healthcare outcomes.

The journal also seeks thoughtful, meaningful reviews and opinion pieces focused on AI education and AI's role to educate radiologists, referring providers and patients, as well as other important issues in the specialty.

"Our goal is to deliver the same high quality of original scientific research as our parent journal, *Radiology*, but focused on AI," Dr. Kahn said. "In addition to original research, we welcome articles that explore the ethical, social, legal and economic implications of AI in radiology."

Radiology: Artificial Intelligence is published bi-monthly and available exclusively online.

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RSNA is an association of over 53,400 radiologists, radiation oncologists, medical physicists and related scientists, promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Ill. (*RSNA.org*)