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## **Interpretable AI in Medicine: Generating Radiological Reports with Panoptic Scene Graphs**

*Wednesday, 15 May 2024 11:20 (25 minutes)*

We explore the integration of panoptic scene graphs in the field of chest radiographs, to enhance explainable medical report generation. Panoptic scene graphs require a model to generate a more comprehensive scene graph representation based on panoptic segmentations rather than rigid bounding boxes and thus present a more holistic image representation. These graphs facilitate accurate report generation by structuring the diagnostic process in an interpretable data format and enabling a precise mapping between relevant findings and visual regions. Through the utilization of the generated graph structures, large language models can produce reliable medical reports, for which medical practitioners through the underlying datastructure gain insights into AI-generated decisions, thus fostering a deeper understanding of the underlying rationale. This advancement marks a significant step towards enhancing transparency and interpretability in medical AI systems, ultimately improving patient care and clinical decision-making.

### **Type of presentation**

Invited Talk

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**Session Classification:** Invited session

**Track Classification:** Spring Meeting