

**FGAI4H-N-023-A01**

E-meeting, 15-17 February 2022

**Source:** TG-Radiology Topic Driver

**Title:** Att.3 – Presentation (TG-Radiology)

**Purpose:** Discussion

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**Abstract:** This PPT contains a presentation about TG-Radiology.

# Topic Group on AI for Radiology: Audit Trial

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Topic Driver

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# Audit Team

1. Andrew Murchison (Clinical Expert)
3. Giovanna Gutierrez (Clinical Expert)
4. Ian Shadforth (ML Expert)
5. Jana Fehr (ML Expert + Clinical Expert)
6. Md. Golam Rasul (Software Platform Expert / Audit Developer)
7. Regina Geierhofer (Regulatory Expert)
8. Saul Calderon Ramirez (ML Expert + Regulatory Expert)
9. Shada Alsalamah (ML Expert + Clinical Expert + Regulatory Expert)
10. Vasanthakumar Venugopal (ML Expert + Clinical Expert + Ethical Expert)
11. Vincent Appiah
12. Issah Abubakari Samori
13. Judy Wawira Gichoya
14. Dominik Stosik
15. Edson Mintsu Hung

# AI in Radiology - Use Case

Diagnosis of COVID-19 via Chest X-Ray

Undisclosed Test Data (Vasantha):

917 cases

436 RTPCR+ cases

481 COVID negative cases

Open source models for audit trial:

<https://github.com/velebit-ai/COVID-Next-Pytorch>

<https://github.com/lindawangg/COVID-Net>



# COVID-TEST-CXR



Name ↑



covid\_status mapping file.xlsx

👤 Modified 27 Oct 2021



dicoms.zip

👤 Modified 14 Jul 2020



jpgs.zip

👤 Modified 14 Jul 2020



pngs.zip

👤 Modified 14 Jul 2020



# Audit Verification Checklist

Completed

Link:

<https://docs.google.com/document/d/1y9diy9cdM9dlakCtUlsDR3xxrKSwbriYQ9C-EW/WIXAA/edit#heading=h.gjdgxs>

Findings:

1. Very detailed
2. Too long, can be reduced
3. Some items can be combined



# Audit Challenge

Link: <https://health.aiaudit.org/web/challenges/challenge-page/174/overview>

Creating the TG-Radiology Audit challenge on health.aiaudit.org

Added in metrics (precision, recall, AUROC, accuracy, F1 score)

## TG Radiology Test Challenge

Name 



annotations

 Modified 9 Feb 2022



challenge\_data

 Modified 9 Feb 2022



evaluation\_script

 Modified 9 Feb 2022



templates

 Modified 9 Feb 2022

worker







## TG Radiology

★ 1

Organized by: TG Radiology

Starts on: Jan 1, 2019 12:00:00 AM

Ends on: May 31, 2099 11:59:59 PM

[Overview](#)[Evaluation](#)[Phases](#)[Participate](#)[Leaderboard](#)

### Audit Overview

"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?"

"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure



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