BIR
The British Institute of Radiology

In association with

RCR
The Royal College of Radiologists

28-29 JANUARY 2021

APPROVED BY THE BIR

ARTIFICIAL INTELLIGENCE IN PRACTICE 2021

Virtual event

CPD: 8 CREDITS (4 PER DAY)

BAYER

Bayer have part funded this event

PHILIPS

SIEMENS Healthineers

Advanced Accelerator Applications
A Novartis Company

ARTIFICIAL INTELLIGENCE IN PRACTICE 2021

Virtual event

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28-29 JANUARY 2021

After the success of the last three artificial intelligence events in 2018, 2019 and 2020 jointly organised by The British Institute of Radiology in association with The Royal College of Radiologists, we are back again in 2020. This time it will be even bigger and better with a new format-VIRTUAL!

This year's event will be held across two-days with afternoon sessions appealing to our multidisciplinary audience.

We invite all radiologists (consultants and trainees), radiographers, physicists, oncologists as well as other healthcare professionals and those with an interest in AI to join us at this exciting event.

All sessions will be recorded and avaialble to those registered on-demand if you are unable to attend the live event.

Programme Organisers

Dr Hugh Harvey, Managing Director, Hardian Health

Dr Amrita Kumar, Consultant Radiologist, Frimley Health

Sponsors

A special thank you to this years' sponsors

osl

zebra MEDICAL.VISION

aidence

This course provides 8 CPD credits in accordance with the CPD Scheme of the Royal College of Radiologists

ARTIFICIAL INTELLIGENCE IN PRACTICE 2021

CPD: 4 credits

Day 1 – Thursday 28 January 2021

13:00	**Welcome and introduction**
13:05	**Connecting our hearts – AI in cardiovascular medicine** Dr Declan O'Regan, Professor of Imaging Sciences, Imperial College London
13:25	**Q&A**
13:30	**Value of AI for patients** Professor Saurabh Jha, Assistant Professor, University of Pennsylvania
13:50	**Q&A**
13:55	**What you need to know about the new MDR and UKCA regulations** Dr Hugh Harvey, Managing Director, Hardian Health
14:15	**Q&A**
14:20	**AI in Radiology – from technical innovation to clinical benefit** Mr Hasan Jouni, Business Development Manager - Digital Health, Siemens Healthineers
14:40	**Opportunistic identification of coronary calcium on non-cardiac CTs to flag patients at risk of future cardiovascular event** Dr Orit Wimpfheimer, Chief Medical Officer, Zebra Medical Vision
15:00	**Refreshments**
15:15	**iCAIRD Experience** Dr Gerald Lip, Clinical Director, North East of Scotland Breast Screening Service, Chief Investigator, Mammography AI project as part of iCaird, University of Aberdeen
15:35	**Q&A**
15:40	**Procurement Journey in the NHS: Brainomix Experience'** Mr Riaz Rahman, VP Healthcare Global, Brainomix
16:00	**Q&A**
16:05	**Is the NHS to slow to adopt – Panel discussion** Mr Dominic Cushnan, Head of AI Imaging, NHSX; Dr Kiruba Nagaratnamv, Consultant Stroke Physician and Geriatrician, Royal Berkshire NHS Foundation Trust; Mr Hassan Chaudhury, Digital Health Specialist, Healthcare UK
16:30	**Close of day 1**

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Day 2 – Friday 29 January 2021

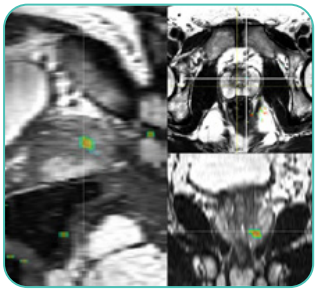
13:00	**Welcome and introduction**
13:05	**Latest updates on data governance and ethics** Ms Jessica Morley, Policy Lead EBM DataLab, University of Oxford
13:25	**Q&A**
13:30	**Adoption of AI into the NHS - realities/ experiences** Dr Indra Joshi, Director of AI, NHSX
13:50	**Q&A**
13:55	**What do the patients think?** Dr Liz O'Riordan, Breast Surgeon with breast cancer and patient advocate
14:15	**Q&A**
14:20	**Industry talk** Mr Jeroen van Duffelen, COO and Co-founder, Aidence and Dr Lizzie Barclay, Medical Director, Aidence
14:40	**Industry talk** Speaker TBC
15:00	**Refreshments**
15:15	**A Culture of Continuous Privacy Compliance** Mrs Karima Noren, Co-Founder, The Privacy Compliance Hub
15:35	**Q&A**
15:40	**Health economics for the NHS for AI adoption** Speaker TBC
16:00	**Q&A**
16:05	**Values framework for deals between NHS and Industry** Dr Claire Bloomfield, CEO, National Consortium of Intelligent Medical Imaging
16:30	**Q&A**
16:35	**Fostering a strong ecosystem for AI in medical imaging** Dr Geraldine McGinty, President of the American College of Radiology, Chief Strategy Officer, Weill Cornell Medicine
16:55	**Q&A**
17:00	**Close of event**

Product spotlight: Watson Elementary

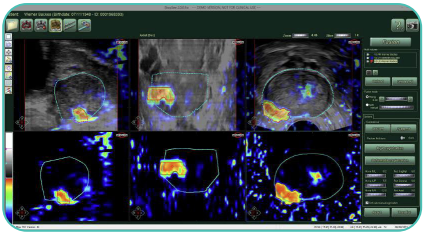
Fast malignant lesion detection

The Watson Elementary software has incorporated deep learning and artificial intelligence (AI) neural nets to produce an accurate and exceptionally fast prediction of a suspicious lesion in the prostate. The system has also utilised AI to ensure that the new feature of auto-segmentation of the prostate is reliable and precise. It's core is embedded in AI and AI will continue to help guide it's development.

Reach beyond today



- Automatic fast image co-registration of T_2WI, Diffusion Weighted (DWI) and Dynamic Contrast Enhanced (DCE) MR images, works without DCE too
- Automatic image resolution matching
- Automatic Apparent Diffusion Coefficient (ADC) map generation
- Automatic DCE model fits
- Real time per-pixel data access
- Synchronized side-by-side 3D viewing
- Synchronized parameter overlays
- Automatic standard report generation
- Extended annotation of ROIs and prostate outline
- Easy PI-RADS 2.1 scoring
- Workflow checklists
- DICOM Structured Reporting with worklist support
- DICOM RTS Export



Contact OSL and arrange a demo today.

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osl.uk.com

ZEBRA MEDICAL VISION

2014
ESTABLISHED

AI FOR MEDICAL IMAGING
A 2B$ MARKET BY 2023

5
GLOBAL DIRECT OFFICES

THE CHALLENGE

The demand for medical imaging services is continuously increasing, outpacing the supply of qualified radiologists and stretching them to increase output, without compromising patient care.

1	50	400	1.6
Radiologist	Patient studies	Images / study	Seconds / image

WE TRANSFORM PATIENT CARE USING AI

Zebra-Med uses AI to empower radiologists and help them along with health providers manage the ever increasing workload without compromising quality of care.

OUR METHODOLOGY

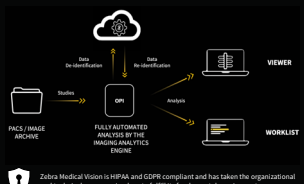
We teach computers to automatically read and diagnose millions of medical imaging studies with clinical records to create high-performance algorithms that detect medical conditions faster, for numerous findings in parallel.

ZEBRA-MED SOLUTIONS

Using 30M patient scans with associated clinical data, we provide a wide range of AI products for Radiology, Cardiology, ER and more. A wide range of AI products for radiology, integrated into the workflow.

HOW IT WORKS

Automated Imaging Analytics Engine



Zebra Medical Vision is HIPAA and GDPR compliant and has taken the organizational and technical measures in place to fulfill its fundamental requirements.

Bone Health Solution - VCF identification vertebral compression fractures in an effort to help stem the widespread impact of osteoporosis.

Cardiac Solution - CCSng analyze existing coronary data to provide an 'early-warning' system for asymptomatic suffers from coronary artery disease.
Expected FDA submission Q4 2020

Neuro Solution - ICH, MLS a radiological computer-aided triage and notification software indicated for use in the analysis of adult non-contrast head CT scans for ICH and MLS 510K pending.

COVID19 Solution relieves the burden on health systems globally by providing timely decision support tools for clinicians.
For investigational use only

Chest solution:
Abnormal Chest X-ray. Pneumothorax (FDA,CE), **Pleural Effusion** (FDA, CE), **Pulmonary opacities** (Investigational use), **Free air** (investigational use). A suite of radiological triage and notification software that automatically flag clinically significant findings.
Normal Chest X-ray. A radiological workflow tool to optimize the reporting on chest x-rays with no radiological evidence of clinically-significant abnormalities. Not commercially available in the US, for investigational use only.

Mammo Solution - 2D Mammo Triage aid the mammographer with a more accurate reading of suspicious lesions while reducing the number of false positives that hamper the current solutions.

INNOVATION

Over 20 granted patents

11 PUBLICATIONS

A robust mix of data science, clinical research and collaborations to achieve game changing results
nature medicine

REGULATION

10 Marks
6 Clearances

KEY PARTNERS

Google, PHILIPS, CHANGE HEALTHCARE, AMGEN, aws, Canon Canon Medical Systems USA, Inc., Intermountain Healthcare, intelerad, NUANCE, Johnson & Johnson, NVIDIA, wellbeing, CLALIT, EMERGENT CONNECT

"...We were quite pleased with the Zebra-med pilot and results, and as such are expanding our use of the technology to increase the patient flow into our FLS program in 2018 and 2019..."

DR. KASSIM JAVAID
ASSOCIATE PROFESSOR, UNIVERSITY OF OXFORD

"...Our radiologists are gaining a level of trust in the emerging technology and are adapting to the integration of AI results into real-time radiology reporting..."

DR. KEITH WHITE
MEDICAL DIRECTOR, IMAGING SERVICES, INTERMOUNTAIN HEALTH

"...Zebra-med's acute CXR pneumothorax and CT Brain bleed products demonstrated a promising potential to substantially reduce turn around time and increase the radiologist's confidence in making these diagnoses..."

DR. TERENCE A. MATALON
CHAIRMAN OF IMAGING, ALBERT EINSTEIN MEDICAL CENTER

DISTRIBUTION CHANNELS FOOTPRINT

Over **10,000** hospitals in **40** countries

COMPRESSION FRACTURE:
10X Uplift in capacity of FLS with 100% treated patients satisfaction

PROVEN ROI

TRIAGE:
85% Reduction in time to detect Pneumothorax and Intracranial Hemorrhage cases

WWW.ZEBRA-MED.COM

Version 3.1.05, November 16, 2020

aidence
human sense in artificial intelligence

Veye Chest is CE-marked as a second or concurrent reader

Veye Chest

your AI lung nodule management assistant

Veye Chest
clinical features

Detection

- >= 3mm and <=30 mm in size
- Solid and sub-solid nodules

(part-solid/ground-glass opacity)

Quantification

- Diameters: long axis, perpendicular short axis, and the average axial diameter
- Volume: per-slice segmentation and 3D visualisation

Growth assessment

- Growth percentage
- Volume Doubling time (VDT)

Integration

- Seamless integration with any PACS

Why radiologists
choose Veye Chest:

"I love the detection indications. It is a simple yet effective solution that really helps me to report nodules faster. I directly know where to find them."

Dr. Caroline McCann, Liverpool Heart and Chest Hospital NHS Trust Foundation (UK)

"Veye helps us read CT chest scans faster because it provides clear markers for nodules."

Dr. Floris Rietema and Dr. Paul Algra, Northwest Clinics (the Netherlands)

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