

# How we're building tomorrow's augmented healthtech

By Stine Mølgaard Sørensen  
Radiobotics



Radiobotics  
Augmented Radiology

Hi I'm  
Stine and I'm  
Co-founder of  
Radiobotics



Stine Mølgaard  
Co-founder & COO  
Cand. Communications



We are building tomorrow's augmented healthcare technology

Radiobotics strives to challenge the status quo in **radiology**, by fully automating routine image analysis, accelerated by state-of-the-art machine learning methods



“We need to find areas where **AI** can help us save more time - so we can spend our time more wisely and put our efforts where it's needed.”

Mikael Boesen  
Professor, MSk Radiologist  
Head of Department Bispebjerg Hospital



[See video source](#)



**Radiobotics**  
Augmented Radiology



## Aid the increasing global demand for more specialised radiologists

At least 1,000 vacancies alone in the UK in 2017, and many more globally, while the number of X-ray examinations is growing rapidly, by 30% during the period 2012-17 (Royal College of Radiology, 2017).



## Ensure that patients receive faster treatment with lower risk of misdiagnosis

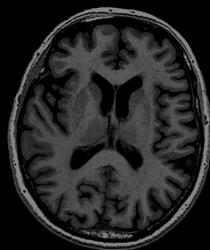
Leads to direct and indirect savings, through less time use, saved expenses on treatment, shorter waiting time for patients and referring physicians.



## Help clinicians free up time to spend on more urgent and complex cases

We are automating reporting on routine low risk tasks, that often get stuck in the bottom of a work list. Decreasing time spent on these cases, will free up time for more urgent complex cases.





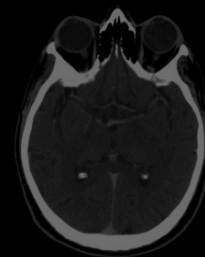
MRI



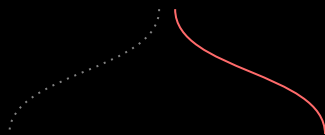
X-Ray



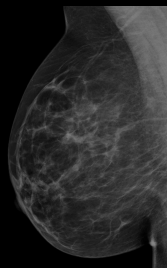
Ultrasound



CT



Mammography,  
Chest, etc



Routine MSk x-ray images

**This is our niche focus**

- Very high volume
- Low competition
- Growing demand
- Often outsourced to teleradiology



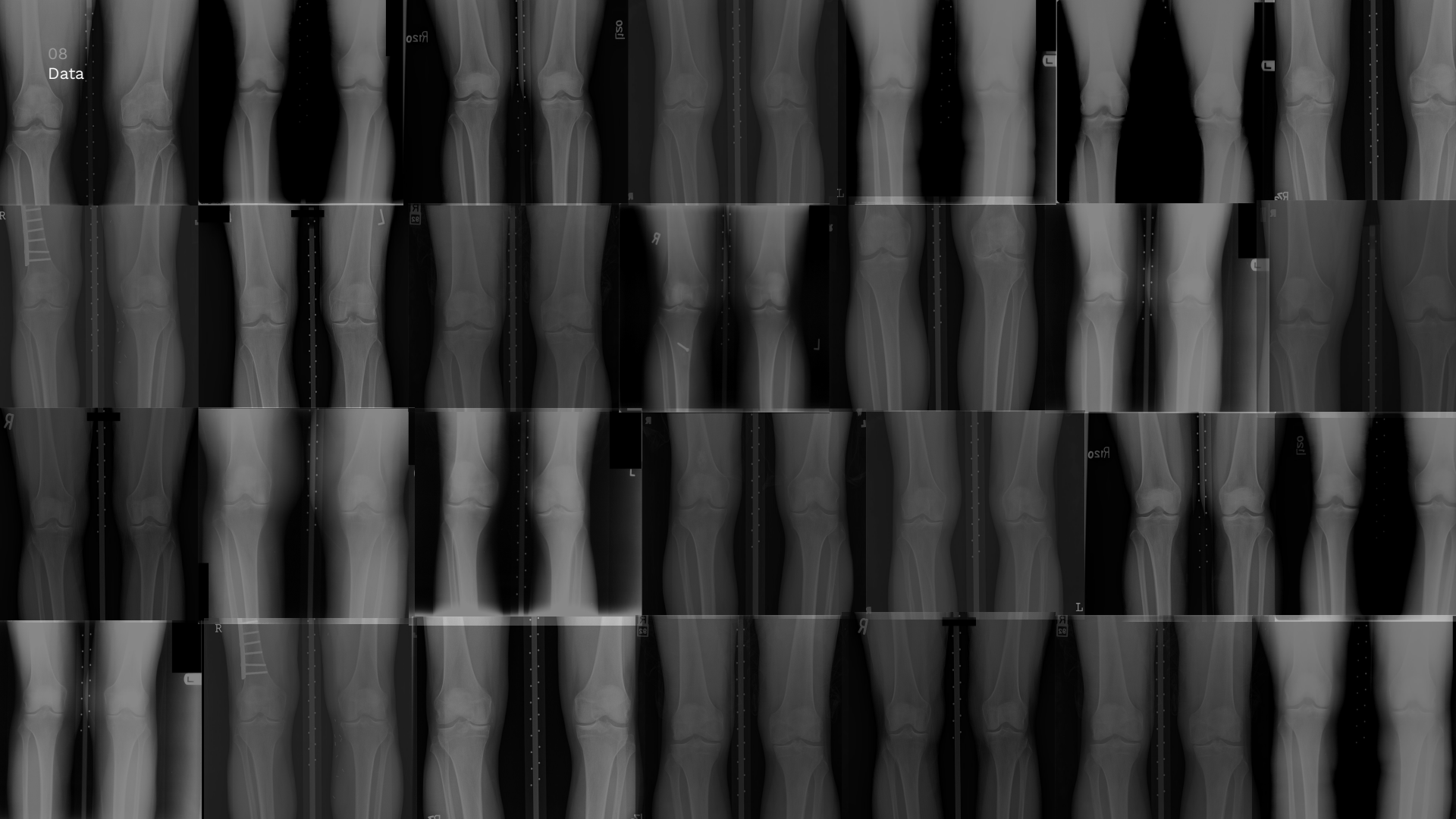
01: Data

02: Algorithms

03: Implementation

04: Regulatory







## Image analysis

Based on advanced  
computer vision  
and deep learning  
methods



## Generated report

Fully Automated  
report of knee  
arthritis

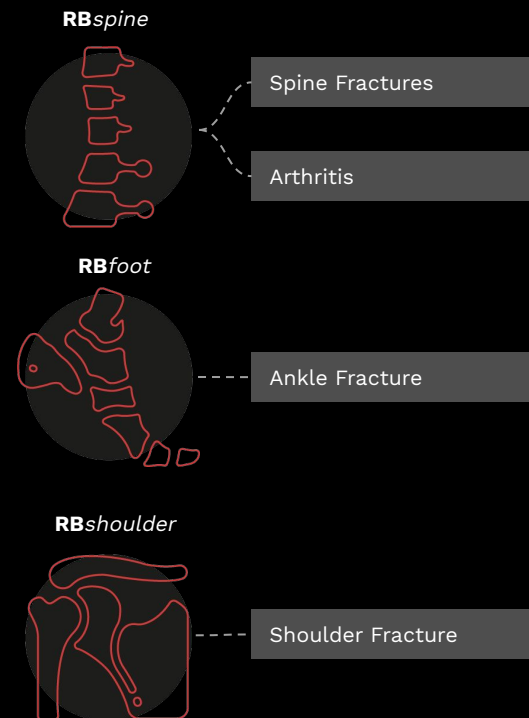
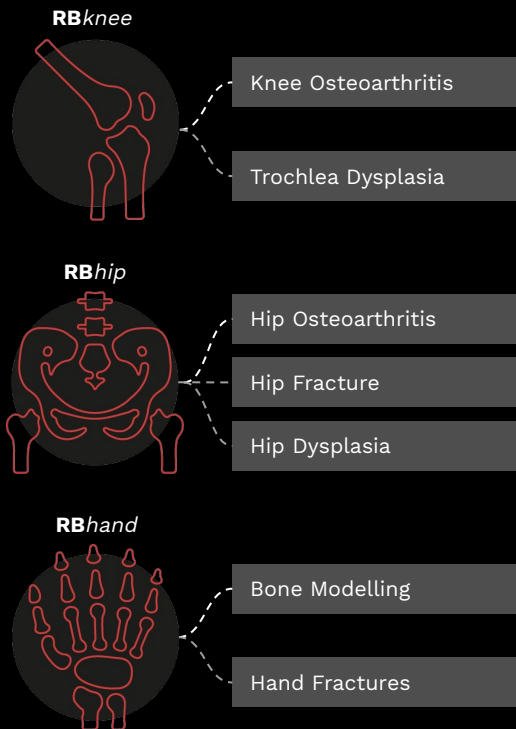
Integratable into  
PACS

Currently undergoing  
clinical test at  
hospitals





## Radiobotics Core Software



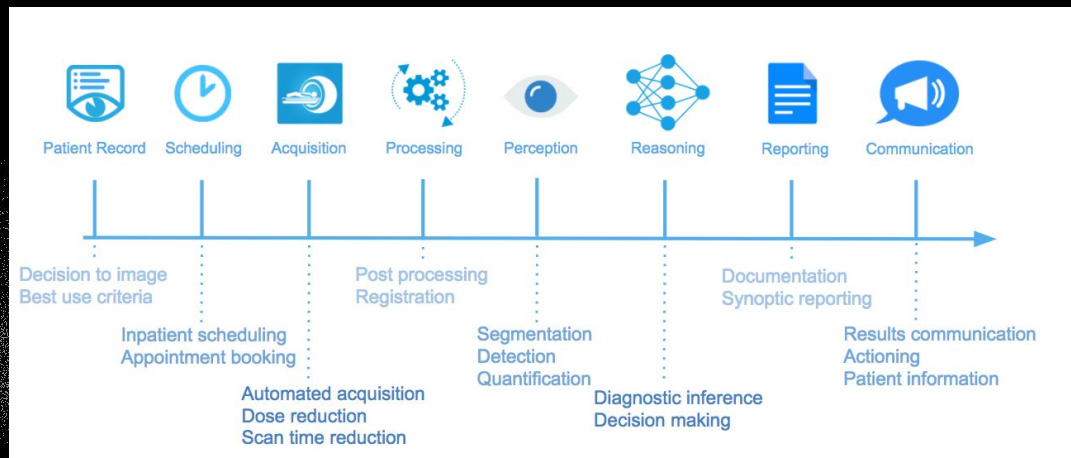
## Why AI will not replace radiologists



Hugh Harvey [Follow](#)  
Jan 24, 2018 · 9 min read

In late 2016 Prof Geoffrey Hinton, the godfather of neural networks, said that it's "quite obvious that we should stop training radiologists" as image perception algorithms are very soon going to be demonstrably better than humans. Radiologists are, he said, "the coyote already over the edge of the cliff who hasn't yet looked down".

This kick-started a hype-wave of biblical proportions that is still rolling to this day, and shows no signs of breaking just yet. In my opinion, although this wave of enthusiasm and optimism has successfully brought radiology artificial intelligence to the forefront of people's imaginations, and immense



From <https://towardsdatascience.com/why-ai-will-not-replace-radiologists-c7736f2c7d80>



**Radiobotics**  
Augmented Radiology



Mads Jarner  
Co-founder & CEO  
M.Sc. Biomedical  
Engineering



Stine Mølgaard  
Co-founder & COO  
Cand.  
Communications



Martin Axelsen  
Co-founder & CSO  
PhD Machine Learning  
& M.Sc. Biomedical  
Eng.



Pavel Lisouski  
Co-founder & CTO  
M.Sc. Computer  
Vision & Machine  
Learning



Eric Navarro  
Machine Learning  
Engineer  
M.Sc. Electrical  
Engineering



Guillermo Galán  
Olleros  
Data Ops Engineer  
M.Sc. Electrical  
Engineering



Astrid Ottosen  
Prd. Quality Manager  
M.Sc. Biomedical  
Engineering



Ronnie Dalsgaard  
Director Prd. Strategy  
M.Sc. Biomedical  
Engineering



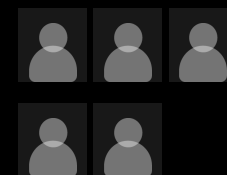
Andreas Nexman  
Software Engineer  
M.Sc. Biomedical  
Engineering



Rachael Carkett  
Junior Business  
Analyst.



Mikael Blædel  
Head of Design  
B.A. Visual Arts



5 Part-time  
radiologists  
For data annotation





Thanks!

