

see more,  
know more,  
manage better

# Bedre lusekontroll med kunstig intelligens

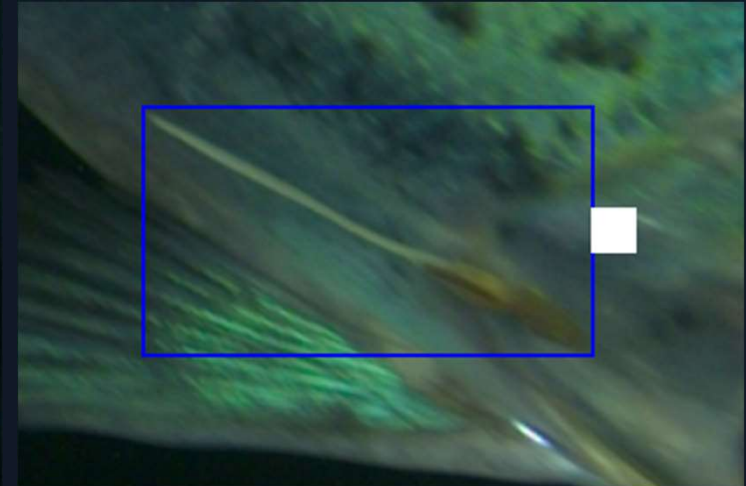
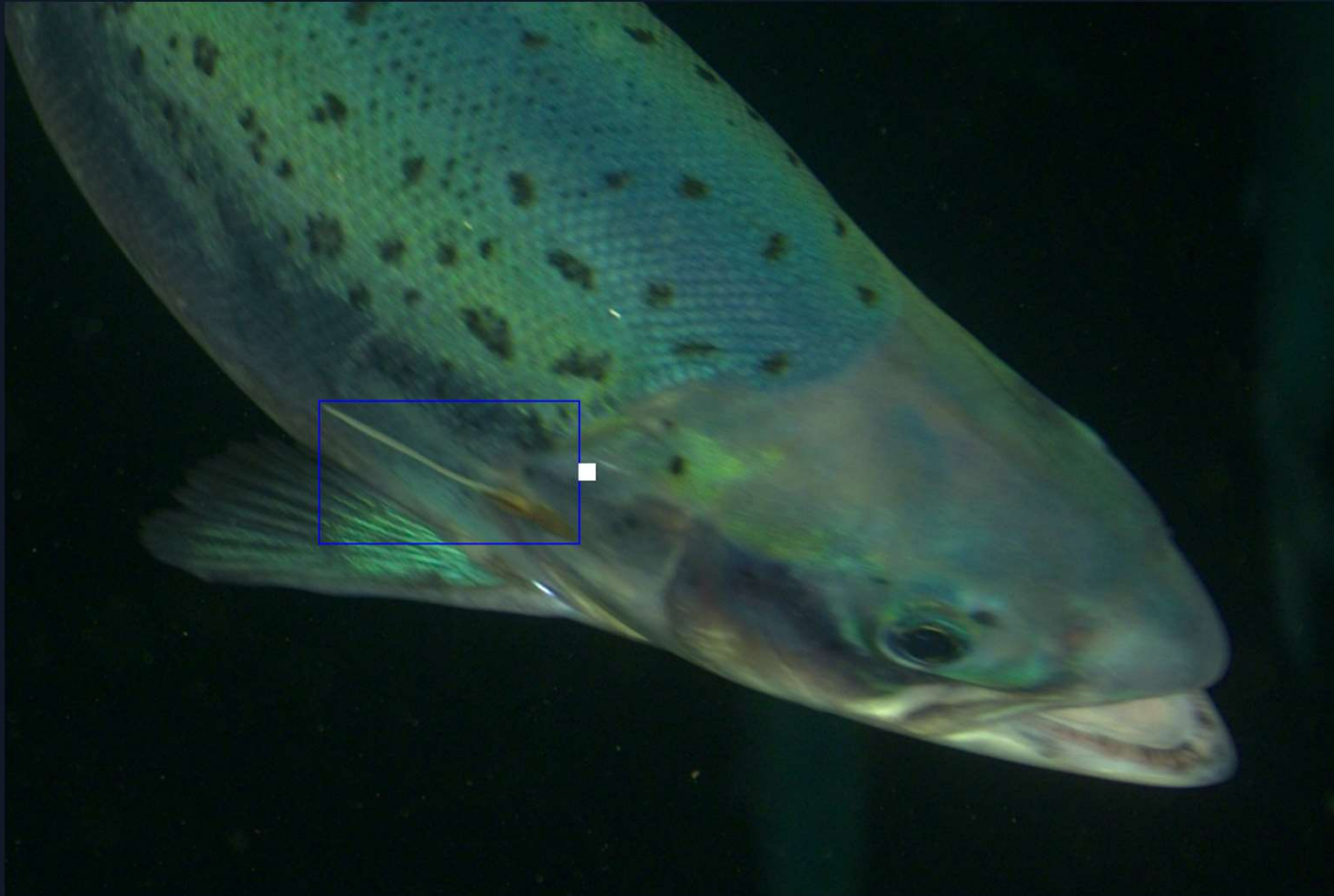
Gunnar Berg, Quality and Product Manager



# Hva er maskinlæring?



# Trene modellen



# Hvordan fungerer det i praksis?

## 1. CAMERA & SENSOR INPUT



## 2. ML ALGOS & DATA PIPELINE

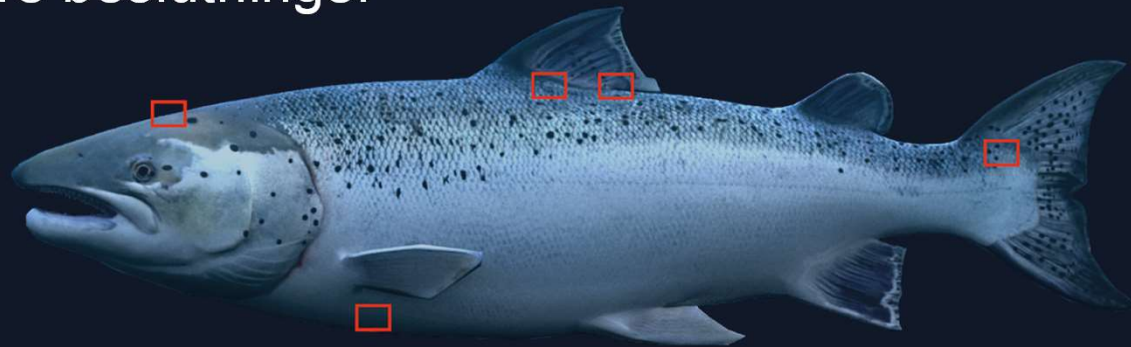


## 3. DATA OUTPUT FOR FARMERS



# LICE - Automatisert lusetelling

- Lusetelling uten stress og håndtering
- Daglige lusetall
- Bedre kontroll, bedre beslutninger

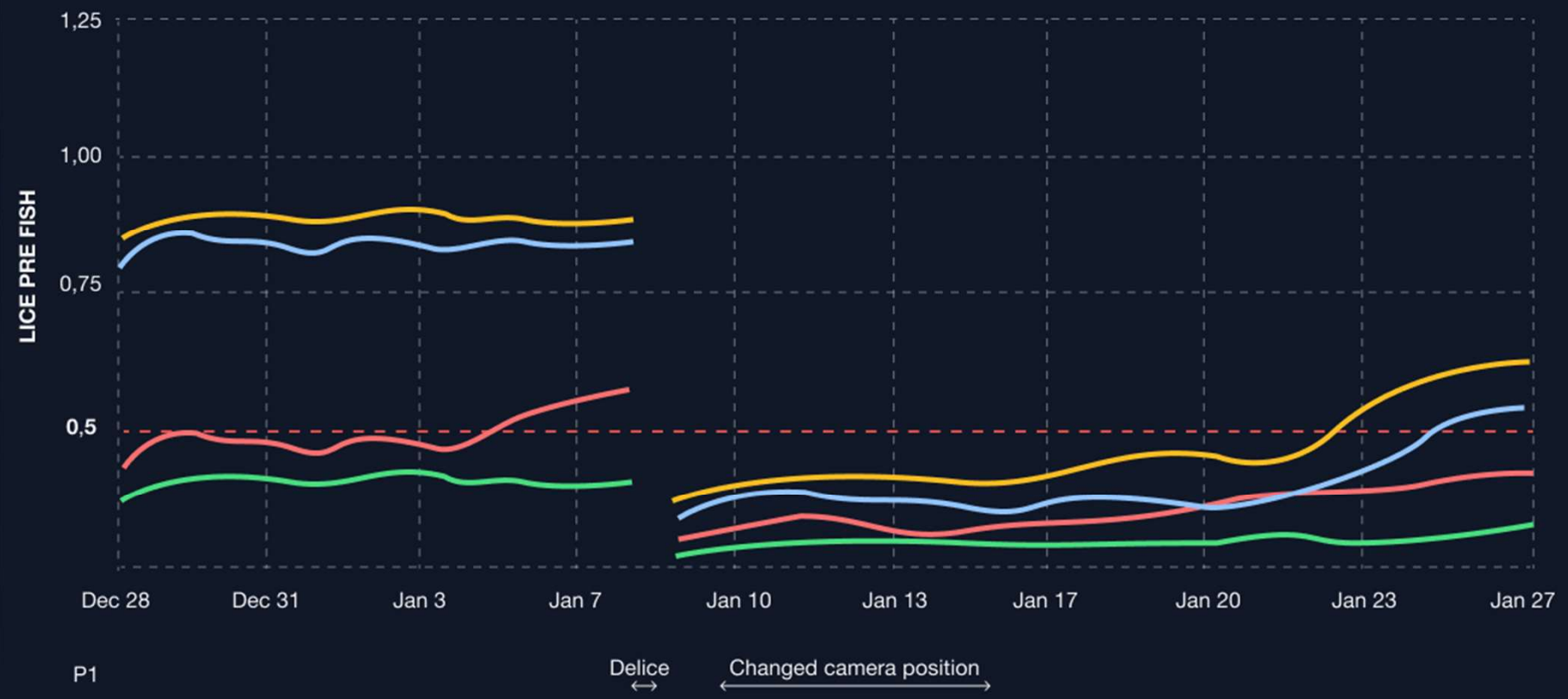


- CAMERA
  - Overview
  - Chart
- Lice
  - Overview
  - Chart
  - Lice report
- Weight
  - Overview
  - Chart
  - Biomass report

ALL P1 P2 P3 P4 P5 P6 Compare

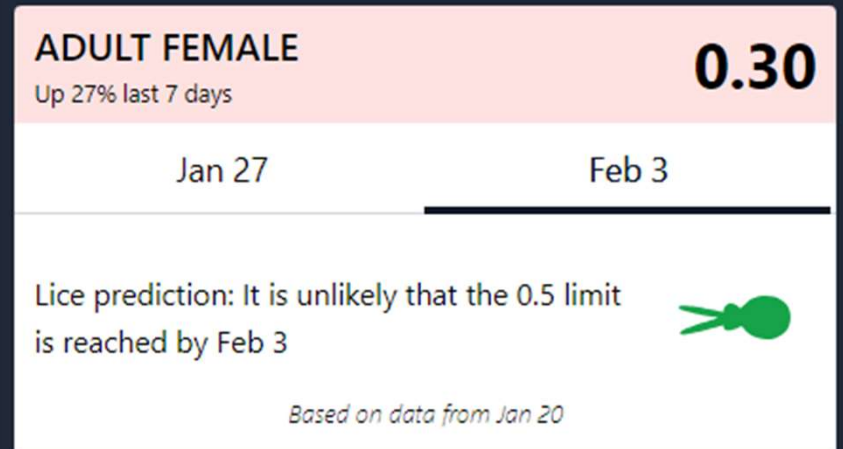
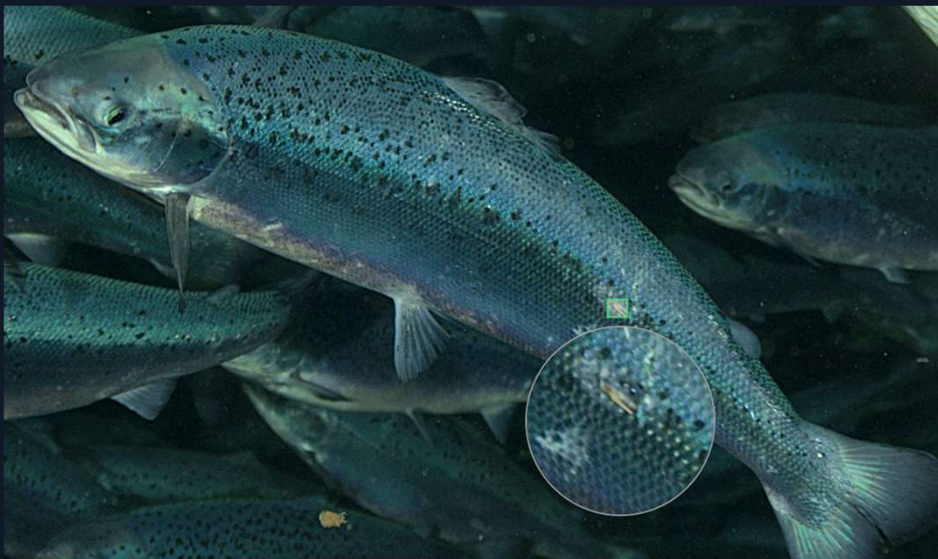
Adult female Mobile Stationary Caligus

Dec 28 - Jan 27



# Validering og luseprediksjon

- Validere alle bildene som blir brukt
- Kunstig intelligens kan predikere fremover
- Sesong, temperatur, lokasjon, lusetall



<b>MOBILE</b> Up 17% last 7 days	<b>0.13</b>
<b>STATIONARY</b> Down 10% last 7 days	<b>0.16</b>
<b>CALIGUS</b> Down 31% last 7 days	<b>0.33</b>

[View last treatment](#)



# LICE - Nedsenkbare merder

- Muliggjør ny teknologi
- Kan telle lus uten å heve merdene
- merdene
- Krever automatisk lusetelling



# LICE - Kombinere velferd og lus

- Gjøre vurderinger ut i fra velferden til fisken
- Tåler fisken avlusing?



<b>BODY WOUNDS</b>	Nothing to remark 96.2% 0% since 20. Jan 2024	264 fish analyzed   21. Jan 2024
<b>SCALE LOSS</b>	Nothing to remark 77.9% 201 of 258 fish -1.3% ↓ since 20. Jan 2024	258 fish analyzed   21. Jan 2024
<b>SNOUT DAMAGE</b>	Nothing to remark 83.6% 204 of 244 fish 0% since 20. Jan 2024	244 fish analyzed   21. Jan 2024
<b>MATURATION</b>	Nothing to remark 100% 255 of 255 fish 0% since 20. Jan 2024	255 fish analyzed   21. Jan 2024
<b>EYE CLOUDING</b>	Nothing to remark 100% 158 of 158 fish +100% ↑ since 18. Jan 2024	158 fish analyzed   19. Jan 2024
<b>EYE DAMAGE</b>	Nothing to remark 100% +100% ↑ since 18. Jan 2024	162 fish analyzed   19. Jan 2024
<b>BULGING EYE</b>	Nothing to remark 100% 174 of 174 fish +100% ↑ since 18. Jan 2024	174 fish analyzed   19. Jan 2024



VEKT



LUS



VELFERD

