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AI enhanced Precision Livestock Farming (PLF) is the next step in farm animal management for optimal productivity and animal welfare

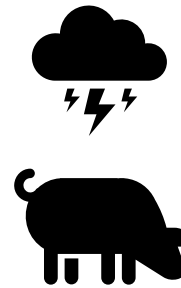
*DVM, Ph.d. Dorte Schrøder-Petersen
ICoMST, Krakow, August 2021*



How to define and monitor animals' needs and desires

1. Freedom from hunger or thirst
2. Freedom from discomfort
3. Freedom from pain, injury or disease
4. Freedom to express (most) normal behaviour
5. Freedom from fear and distress

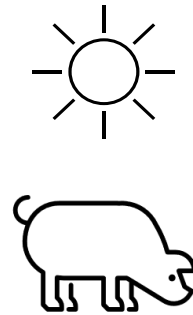
Brambles' five freedoms



Istwert



Distance



Solwert



Why PLF?

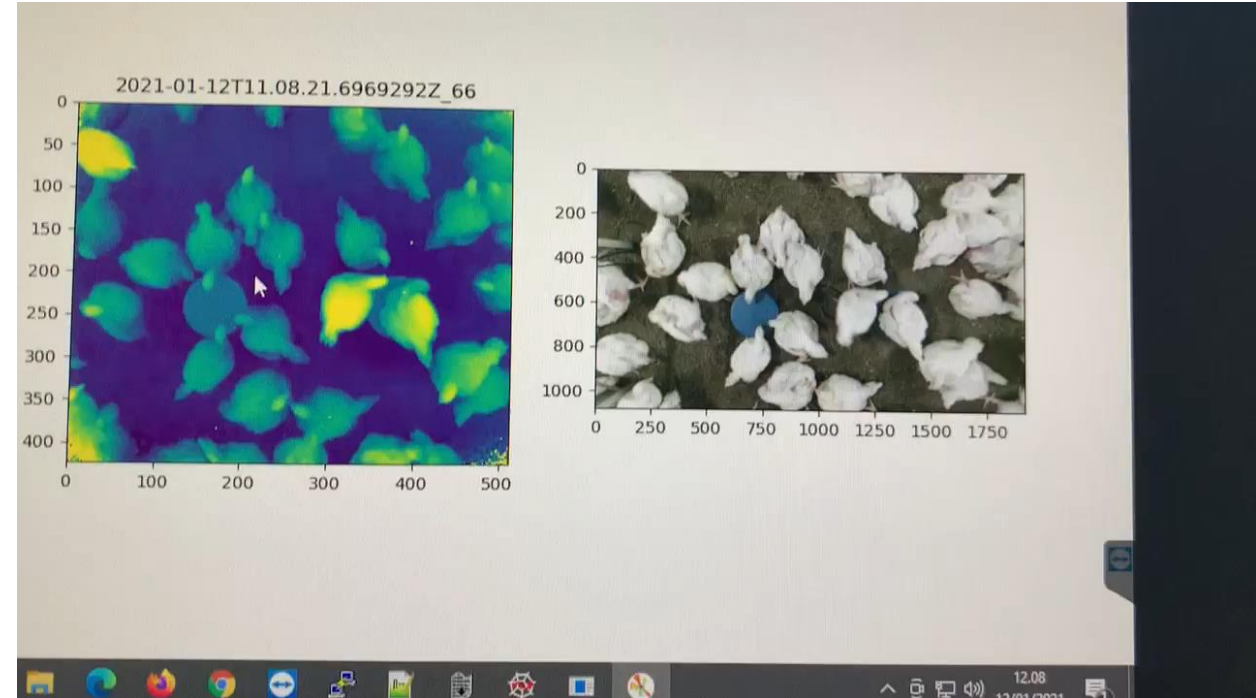


- Provide 24/7 status of all animals
- Allow the farmer to react immediately on deviations and problems as they occur
- Provide a complete and continuous view of the animal welfare status without disturbing and stressing the animals
- Provide documentation for animal welfare
- Close gaps in welfare schemes
- Time reducing for farmer



Examples of PLF

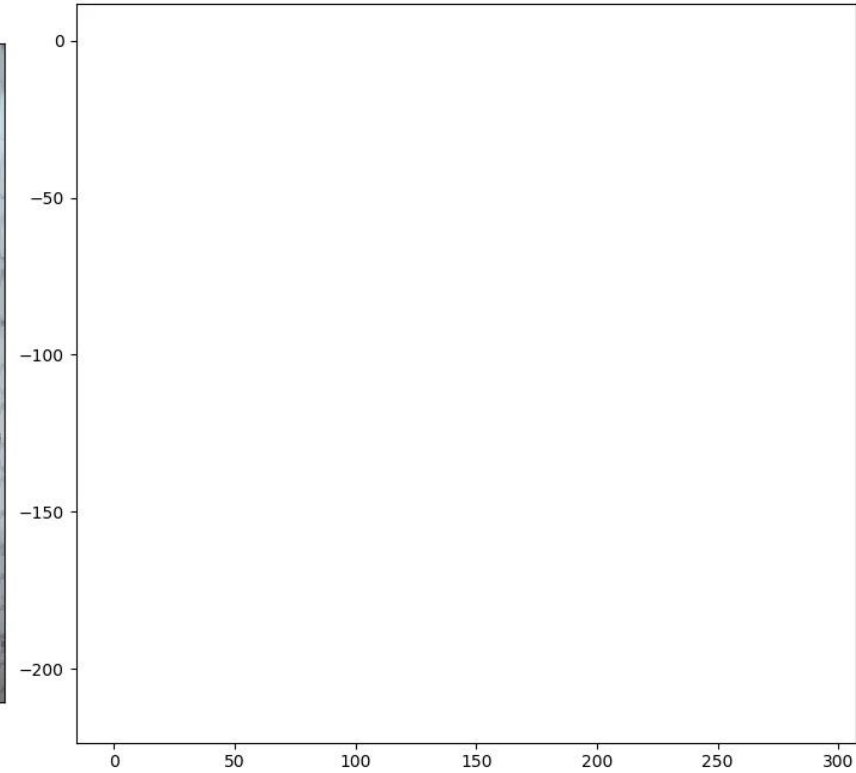
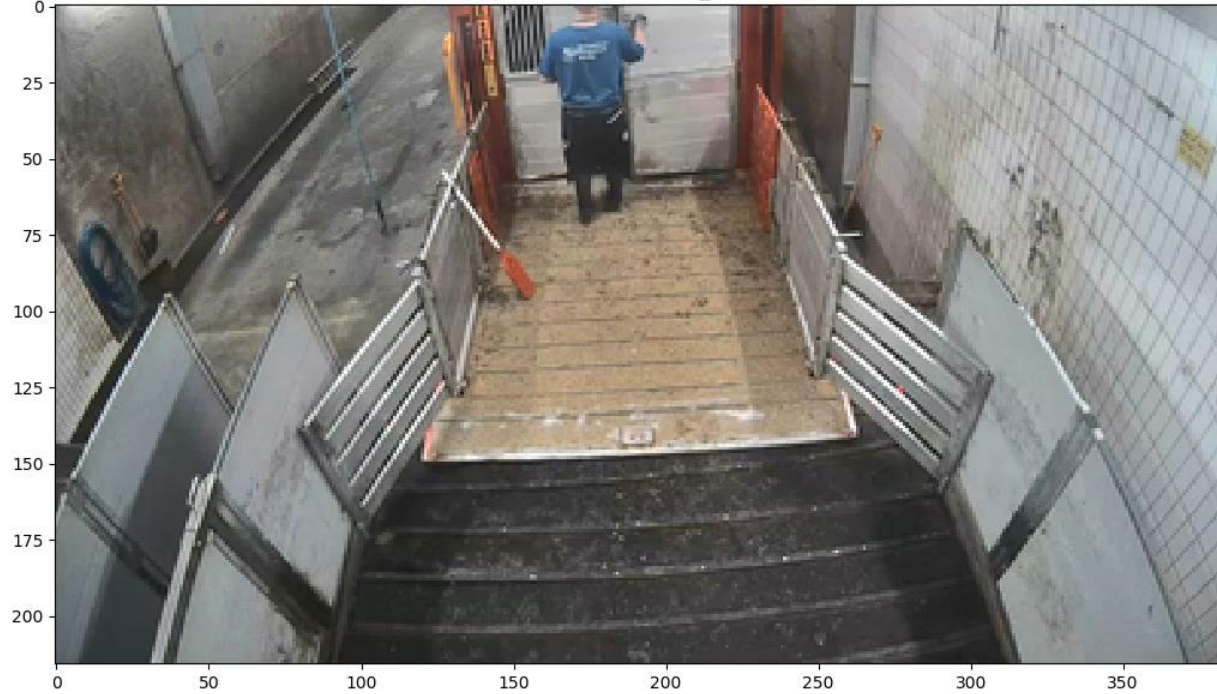
- Load cells – weight
- Thermo camera – temperature of animals
- Audio – vocalisation, cough
- Accelerometer – activity/aggression/locomotor problems
- RFID ± load cells – individual feed intake/growth
- Vision – individual tracking





AI automatic counting of pigs

20190731055327984.UTC+02



Freq



3079.00



At the foot of the mountain.....

- Cost effective for the farmer
- Individual monitoring of poultry and pigs

