theGOAL

Real-time monitoring of livestock and forage quality

that is cost-efficient and respects data privacy using active sensors, UAVs, and robots.

cattle currently feed on grazing land

theSTATS

94,400,000

acres are owned/managed by ranchers

INTELLI-**RANCH**

AUTONOMOUS CYBER-PHYSICAL LIVESTOCK MANAGEMENT WITH INTELLIGENCE-INTEGRATED UAV'S, ROBOTS, & SENSORS

#eCOMPONENTS



+ camera-enabled drones & robots with health sensors & data analytic software & interfaces



+ acquisition, adaptive flight path optimization & sensor selection strategies for most actionable information



+ hardware accelerator for adaptive sensing, planning, & control to minimize power consumption

security

breakdowns

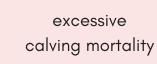


+ privacy integrated into data analytics & autonomous tracking & monitoring system

predator

attacks







unpredicted & untreated diseases



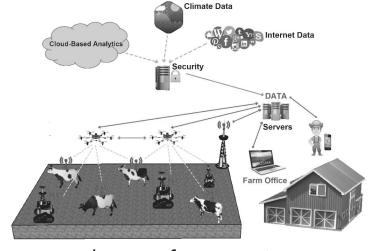
cost & availability of labor



weather patterns



expensive sporadic information gathering



happy farmers & happy economy





+ predator warnings



+ disease & diagnostic information



+ climate prediction



+ commercial spread of tech



INTELLI-RANCH BY DETEC**drone**