Week 2 Class 2

Applications in Agriculture and Healthcare

**Healthcare** – Hospital, nursing care, medical research, clinical science, etc..

**Use cases**

* Diagnosis
* Large amount of data
* Daily pestering tasks
* Image Comparison
* Predictive Analytics

Systems that can identify preemptive conditions

Would not have same diagnosis for an athlete vs 50-year-old man/woman

Muscle tear vs arthritis

Long story short, there are different profiles.

Personalized treatment plans

Age, Sex, Activity, etc., all matters when it comes to a personalized health plan.

Hospital Administration

Records l Management

Drug Discovery

Remote Monitoring

Reasons we can’t go too far in healthcare

PHI

Professional Health Information

PII

Personal Identifiable Information

**The biggest challenge in this field is integration**

**Problem #2 Biases in AI models**

Example – Guy from Europe dies because a bias of USA only samples

**AI Enhanced Care**

**Problems Create by AI**

1. Job Displacement: Data entry operators, front desk personnel. Jobs that have repetitive tasks.
2. Over Reliance on Technology: When hacked into, there can be major repercussions
3. Misdiagnosis
4. Digital Divide
5. Increased Complexity

**Agriculture**

**Major Use Cases**

Crop Monitoring

* Scaling
* Precision Farming

Disease Prevention

* Automating weeding and pest control
* Prediction

**NOT YET SOLVED**

* All the techniques that people use to do daily tasks have to be entered into data base
* Farmers tend to stay the poorest
* Regulatory hurdles

Problems Created By AI

1. Job Displacement: Data entry operators, front desk personnel. Jobs that have repetitive tasks.
2. Over Reliance on Technology: When hacked into, there can be major repercussions
3. Misdiagnosis
4. Digital Divide
5. Increased Complexity