

Class Notes : Oct 25, 2024

- What is literature review (related to course project)
 - It is not a summary
 - Study different aspects of literature
 - Critical commentary of literature
 - Find out research gaps
 - How much literature is related to public policy
 - Comment on credibility of literature you are reviewing
- In this lecture, we will study facial/emotion recognition AI, its history, is it really scientific etc.
- Lying Eyes : Victorian roots of facial recognition
 - It is magazine opinion piece/ popular media ("real life" magazine)
- The expression of emotions in man and animals (Charles Darwin)
 - Long time ago (even today), people believed some things like
 - Cats cross roads implies bad luck
 - Astrology is real
 - " Belief requires proof " is a very modern thought for them.
- Is astrology a science ?
 - No : since can't be proved true or false
- Science is defined by falsifiability (potential for something to be true or false)
 - Called "natural philosophy" in earlier times
 - Things which can't be proved true or false can't be science
 - Hypothesis proved to be true sufficiently and consistently is a theory
- Alchemy , Pathognomy was theory in medieval times
 - Pathognomy : telling character/nature of person through underlying skeletal structure by putting hands on face/head
- It was only after science started that critical thinking started
 - face /skeletal structure change overtime so how could pathognomy be correct?
- Evolution : natural selection
- Expression of emotion by man and animals (Charles Darwin)
 - Physiognomy : darwin idea is that Instead of bones, use facial expression to judge someone character
 - But human character is internal and dynamic
- This physiognomy is pseudoscience but today AI facial emotion/expression recognition system are just doing the same thing
 - People want to work in this area only because there is a lot of money here
 - Powerful people want this technology
- In colonialism, measuring people become popular idea
 - Who is trustable and who is not
- Criminal Tribes Act : some tribes were tagged criminals by birth
 - Later called "denotified criminals"
- After 9/11 attacks, people became paranoid

- Politicians realized that this is the best time to use people's fear, making policies strict, many checking stops, telling people to vote for nationalism etc.
- Emotion detection became popular to catch not normal people in public places like terrorists
- Peoples were afraid so they will agree to anything
- Affect Computing : study of how to develop systems and devices that can recognize, interpret, process, and simulate human emotions
- Essentialism :
 - Human life has essence, there is something fundamental in all people (inherent quality)
 - racism , ethnic, biological essentialism
- Emotions/ Expressions are construct of social context
- Expression are based on situation's power/level/hierarchy