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Title: The profiling of Computer Vision and the Challenge of Computation Empiricism

Presentation Outline

April 16<sup>th</sup>, 2021

CSCI 471.03

1. Introduction of the paper: (Problem definition and brief key point introduction)
  - a. Profiling: Different perspectives of the meaning of ‘profiling’.
  - b. Brief intro of the major ‘knowledge claims’ that the paper is addressing. Bulleted structure to represent these claims.
2. A major focus of the knowledge claims: (Focus of the key points in the context of the paper)
  - a. General Identification and resemblance to the physical world:
    - a. Face value connection of face recognition to the physical world, that is the subjects or the people.
    - b. Apparent Personality Analysis: Depth of transition from the face value to the personality analysis of software.
3. Proliferation through Computer Vision: (Approaches to the problem and their significance)
  - a. ‘looking at people’: Describing what this phrase means in the light of facial recognition and with regards to the depth of the paper.
  - b. Computation personality analysis:
    - i. Goals of Apparent Personality Recognition
    - ii. Early representation: Discuss computation physiology.
      1. What is physiognomy?
      2. Initial Machine learning models that were used.

3. Progress of models to convoluted neural networks and its benefits. Use evidence from the paper.
  - c. Importance of Physiognomy
  - d. Application of Physiognomy
4. Computational Empiricism (Exploring the Key points of the problem and ways being addressed)
  - a. Extraction of information:
    - a. Photography:
      - i. Developed ways to read the information from a photograph.
      - ii. Ways of interpolating numbers and data from pictures for models to understand and predict.
  - b. The mathematical bridge between technology and the physical world.
    - a. Probabilistic nature of math:
      - i. Explaining why the state of the world can't be accurately predicted now. Illustrate the data weight and lack computation demanding resources.
      - ii. Discuss the introduction of paradox within invisible and hidden layers of the system.
  - c. The dominant Epistemology:
    - a. Discuss the new lines of computational empiricism being identified.
    - b. Bullet the 4 elements and give a small description of each.
5. Law with the world state (Conclusion)

- a. The legal drawbacks of having an experimental approach to the entire approach for the APR analysis.
- b. Quote the paper for evidence, mention areas that challenge the data science program thus adding to the drawbacks being faced by the scientist right now.
- c. Mention interlinking of computer vision practices with that of law.
  - a. Show how the law is perceiving the project and their views that are being portrayed.
  - b. Mention what needs to be done for advancing the CV proliferation so that the legal, conceptual, and technical thinking come to an understanding.