Title: The Profiling Potential of Computer Vision and the Challenge of Computation Empiricism

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This paper explores the different claims for measuring the ‘real-world’ and aspects of a subject or prime for identification. As a result, this defines a new paradigm to scale the already operationalized measurement systems in computer vision. The focus of this paper revolves around recognizing a person as an object then eventually understanding their expressions. Thereby interpolating a type of personality analysis, called Apparent Personality Analysis or Apparent Personality Recognition. Goldenfein talks about the involvement of neural networks as a new form of vision to perceive an object instead of relying on the ‘face value features’ depiction. These 'face value depictions' are those by photographs, telescopes, and radiographic photograms. He talks about how large data sets are not the source for such a ‘vision’. He mentions a deeper belief in how the world can be understood, being premised on new systems of measurement, representation, understandings of human subjectivity and statistical analysis. His illustration to such a belief is by weighing Computational Empiricism as a Dormant Epistemology by outlining the system on three accounts:

1. Operation on the basis that external measurement or observation is a more reliable pathway to knowledge than the symbolic output of a subject.
2. It involves a specific type of computational intervention in the relationship between measurement and classification.
3. There is a strong belief that this process is working towards exposing the fundamental substructures of reality.

The paper further dwells on legality by discussing the world state and how legal thinking allows perception to be realized. Legality also allows technology to give a ‘fair’ gist of what reality is and can be and specific applications of data science on ethical and/or political grounds. There is a brief mentioning of the correlation of Law and Computer Vision Profiling that has already been iterated across different papers. A few examples he brings out to justify this correlation is by mentioning Article 5, Article 22 and the example GDPR.

Work Cited:

*Jake Goldenfein. 2019. The Profiling Potential of Computer Vision and the Challenge of Computational Empiricism. In Proceedings of the Conference on Fairness, Accountability, and Transparency (FAT\* '19). Association for Computing Machinery, New York, NY, USA, 110–119. DOI:https://doi.org/10.1145/3287560.3287568*