Courtroom trials paper
- review: Sinan Wikcuatam

1) The larger problem this paper seeks to address is that of juries reaching false guilty verdicts on innocent citizens. The problem is important since up to 100,000 people can be affected by such verdicts. Judges, juries, and the people on trial (alongside their family/friends) will all care if the problem is solved and leads to less false guilty verdicts.

2) The technical aspect in this paper comes into play through the usage of facial recognition, gesture analysis, and voice modulation techniques to detect inconsistencies/possible lies. Three sensors plus a centralized system + algorithmic data processing all contribute to this paper.

3) This paper's hypothesis is that leveraging technology can augment a jury's decision making capabilities through lie detection, thus reducing the number of false guilty verdicts

4) Current solutions are not efficient since 2-5% is the error rate for non-death-penalty cases due to false confessions, guilty pleas, flawed forensic evidence, and faulty eyewitness identification; as a result, it is convincing that a new approach is needed

5) The system seems plausible, however it may require more than a semester to test/implement it. Laying out the framework/approach is more reasonable.

6) Yes it is related to IoT, specifically topics we covered in class regarding human interactions (such as Opo)

8) 7) A figure that would augment the papers validity would be a cross comparison of two similar crime rate/geographic districts with one courthouse using the system the other not. Over time record the guilty verdicts with crime rates over time (x-axis: time, y-axis: guilty verdicts + crime rates)

9) 8) The paper has a solid technical approach while addressing weaknesses, I liked the proposal that it can also help to detect corrupt lawyers as well

9) Paper could be improved by giving a cost/difficulty of implementation metrics.