

Lecture 11 - What ML / AI are good at and what they are not good at.

First A little bit about Stephanie...

Things that ML / AI are doing

1. Facial recognition
2. Giving out traffic tickets
3. Watching neighborhoods
4. Travel recommendations
5. Product recommendations
6. Self driving cars (trucks)
7. Artificial limbs
8. Nerve Repairs
9. Finding financial fraud
10. Paint Colors (from Janelle Shane research)



11. Door Alarms
12. Diagnosing Cancer (Brest Cancer from Mammograms)

People are spending huge sums on ML with mixed results.

1. Google Waymo self driving. In it's last investment round it raised \$2.5 Billion.
2. Zillo house pricing model. Zillo shut down is AI based house purchase and flip unit - estimating its losses at \$500 million. 2500 people bayed off.

Things to Read:

1. <https://spectrum.ieee.org/slight-street-sign-modifications-can-fool-machine-learning-algorithms>
2. <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>
3. <https://www.aclu.org/news/privacy-technology/how-artificial-intelligence-can-deepen-racial-and-economic-inequities/>
4. <https://www.lexalytics.com/lexablog/stories-ai-failure-avoid-ai-fails-2020>
5. <https://www.forbes.com/sites/lanceeliot/2019/12/08/artificial-stupidity-could-be-the-crux-to-ai-and-achieving-true-self-driving-cars/?sh=260a95e225b6>
6. <https://www.thinkautomation.com/automation-ethics/do-we-need-to-worry-about-artificial-stupidity/>

Things to watch:

1. Whites Only : <https://www.youtube.com/watch?v=WHynGQ9Vg30>
2. Are we Automating Racism : <https://youtu.be/Ok5sKLXqynQ>
3. You are a Thing and I Love You : <https://www.youtube.com/watch?v=2ZiPEOFnK1o>