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PUBLIC SAFETY

SOCIAL FACTORS RELATED TO AUTOMATED VEHICLES

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TRUST IN THE AUTONOMOUS VEHICLE (AV)

- Consumer distrust of the technology
- Not being in control
- Apprehension from mishaps



FEAR OF THE AV

- AAA survey
 - ✓ 78% afraid to ride in an AV
- AIG survey
 - ✓ 41% don't want to share road with AVs
- MIT and JD Powers and Assoc. studies
 - ✓ Public becoming less trusting over the last two years

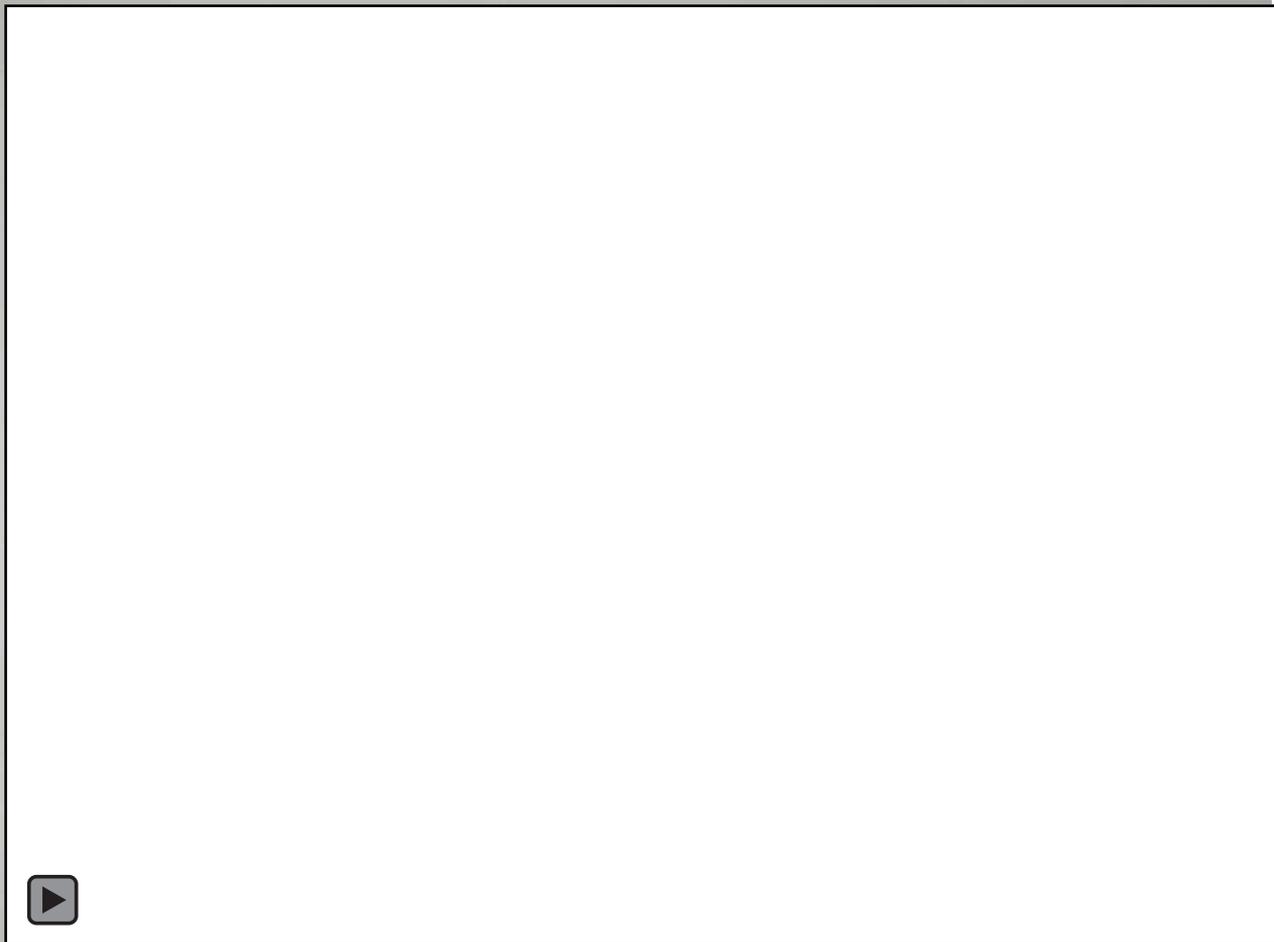
CONSUMER DISTRUST

- Hypothesis:
Familiarity will
ease anxiety
- Choreographed
rides: 180
degree change
in attitude





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- Voice
- Humanizing the AV
- Want the car to “hear”
- Hand gesture recognitio



You're about as much fun as a divorce.
Which is not a bad idea.

VISUALS

- Riders like to see what the car sees
- Understanding why the vehicle does what it does is important



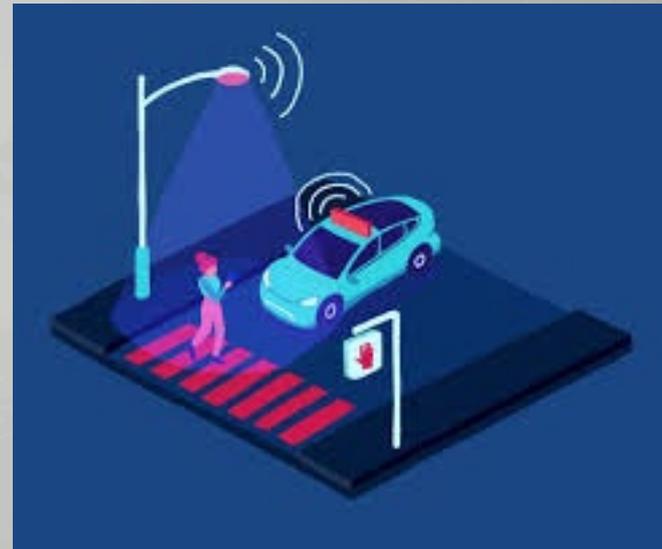
CONTROL

- Want the car to do what they would do
- Machine learning of preferred driving styles
- System learns what the rider wants
- The car adapts to the person
- Algorithm aversion



ANXIETY OF THOSE OUTSIDE THE AV

- Pedestrians and people in non-AVs
- Can the AV “see” me?
- Light bar patterns
- Standards of communication very important!



ETHICAL DILEMMAS



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- “Trolley” Problem
- AVs: Save the most lives
- Own cars: Passenger safety first

OTHER CONCERNS

- Hacking
 - ✓ Vehicle control and data privacy
- Safety
 - ✓ Examples of AV accidents



UNREALISTIC EXPECTATIONS

- Driver still needs to pay attention
- Overestimation of autonomy
- Clearly communicate strengths and weaknesses
- Calibrated trust
- It's not magic!!!!!!

EMBRACING THE AV



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- Trust in the technology
- Confidence in its use
- Convergence of societal and environmental pressures



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THANK YOU

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