1. Abstract
2. Introduction (Brief introduction of paper and why it is important to computer science research and to other areas of study)
   1. Blockchain (Data Storage)
      1. Blockchain is a distributed ledger which means there is a consensus of data over a network that does not need a central data storage
      2. Cryptocurrency Public Example
         1. Bitcoin
         2. Etherium
      3. Private Example
         1. USDA
         2. Banks
   2. AI (Source of computation)
      1. Artificial Intelligence are algorithms with the aim to optimize and recognize patterns over time given sufficient quality data and predictions.
      2. Pattern Recognition
         1. Facial Recognition
         2. Human Behavior
            1. Valuable Commodity
            2. Take uncertainty out of the picture for capital gain
         3. Text Recognition
         4. Voice Recognition
      3. Optimization, predictions and autonomy
         1. Every sector, industry, corporation, non-profit or government agency will want optimization
      4. Data
         1. AI acquire your data to optimize your needs by personalizing what you see in the internet
            1. The world is adapted to you yet at the same time those who own the AI can have an input to what that might look like while at the same time using you as raw data

Can access information about where you are or been and predict from those inputs

* 1. IoT (Source of Data)
     1. The Internet of things are uniquely identified computing devices that transfer data over a network without needing human interaction.
     2. This has become most of smart technology that is available
        1. Phones
        2. Cars/Tractors/Bicycles
        3. Self Checkout machines
           1. Grocery Stores
           2. Fast Food
        4. Smart Grid
           1. Solar Power
           2. Energy Plants
           3. Wind Power
           4. Hydropower
        5. Home Appliances
           1. Home Security

Lights

Cameras

Alarms

* + - 1. Autonomous Robots
    1. Surveillance Everywhere

1. Background ()
   1. Early Development
      1. Start
      2. Rate of growth and innovation
   2. AlphaGo
      1. Human vs. Machine
         1. Overcoming limitations of the human mind
         2. Disruptive technology that reshapes society
            1. Multi Decade Readjustment
      2. Attraction
         1. Google Buyout
         2. Investment into the sector
   3. Governments
      1. Surveillance
         1. Social Credit System
         2. State Surveillance
            1. Uyghurs
            2. US Law Enforcement
      2. Politics and Capitalism
         1. Private Corporate Surveillance State
         2. Micro Behavioral Targeting
         3. Improvement of Infrastructure
            1. Social Stability
            2. Tech Influence in investment for improvement of infrastructure
   4. Cartel of Monopolies
      1. Tech Companies
         1. Google
            1. Google Home
            2. Google search engine
            3. Buyout of smaller companies
         2. Facebook and cambridge analytica scandal 2018
            1. Involvement in 2016 political campaign/ brexit referendum

Increase in voter turnout

* + - * 1. Feed Adjustment

Adjustment in mood and real world behavior

Not in charge

* + - 1. Microsoft
      2. Amazon (AWS)
    1. E-Commerce
       1. Amazon
          1. Alexa
       2. Walmart
       3. China
    2. Oil/Energy Companies
       1. OPEC
    3. Meat Companies
    4. Elite
       1. Treadmill of Productivity
          1. Someone rich enough can buy data, machine learning models and the data scientists needed to affect real world behavior
       2. Capital vs Labor
          1. Automation substitution of capital for labor
          2. AI strengthens people with capital
  1. Right to repair, know and privacy
     1. Systemic Inequality
        1. Job Loss
           1. Minority and women

Jobs processing transactions/data are at risk to be taken over by automation

* + - 1. Wealth inequality - rich getting richer, poor getting poorer

Ability to afford education or proper resources to advance

AI’s exacerbation on wealth inequality

* + - 1. Data Privacy
         1. Powerful Commodity to own
    1. Decline of living standards as technology progresses
       1. British Industrial Revolution
          1. Treadmill of Productivity (Coal Example)
       2. The rate of productivity and the rate of the median household income is not proportional. As the rate of productivity increases the median household income starts to flatten.
       3. Productivity is essential for efficiency and that means using less resources or human labor to get the job done. This means a loss of jobs will increase due to automation and productivity growth which will bring health risks to current and future generations
          1. Loss of opportunity and future generational growth
    2. Increase in rights
       1. Right to repair
       2. Right to know what data is being used
          1. Transparency for systems hidden in the back of social institutions
       3. Right to say no to the collection of your data
  1. Current 2020
     1. Urbanization
        1. Increase in people moving to urban centers instead of rural
     2. Pandemic/Diseases
        1. This increase in urbanization can be dangerous as the current COVID-19 pandemic has shown
        2. Systemic instability of most infrastructure
     3. Population Growth
        1. The continuation of population growth will add to urbanization and put a strain on our resources
     4. Climate Change
        1. The inefficiencies in the way we use resources can be answered by AI but optimization and growth in productivity does not always mean we use less resoucres.
  2. Future
     1. AI are tools used by those who control the technology
     2. Scientist who develop these tools are responsible for the real world implications they have on society
     3. How Information travels will be inevitably changed as we move forward.

1. State of the Art & Problem Motivation (Problem addressed by the paper)
   1. AI & IoT devices
   2. Usability of Private Blockchain as to securely use AI
2. Solution (Prototype implementation of empirical research)
   1. Integration of blockchain, AI models and IoT
   2. Research into the effects of disruptive technology on society
3. Proof/Evaluation/Discussion
4. Related Work
   1. AI Safety
5. Future Work
6. Conclusion