**The Benefits and Risks of Artificial Intelligence in the 21st Century**

* **Internet of Things - Jack**
  + Examples of IoT devices
    - Amazon Echo (Alexa)
    - Google Home (Google Assistant)
    - Home Pod (Siri)
  + Positives
    - Able to connect everyday devices to the internet
      * Makes everyday devices such as laundry machines, toasters, ovens that required human interaction can be controlled remotely, anywhere in the world
    - Cost reduction
      * Large amounts of data is now able to be transmitted easily, so it will save time and money
    - Efficiency and productivity
    - Access of information form anywhere in real time
      * Due to the network of devices, a person can access any information they want, from anywhere in the world
  + Negatives
    - Accessing too much personal data, without proper consent
    - Easy to hack into the devices
    - With the use of automation, the need for human labour is reduced
    - Becoming to dependent on technology for everything
* **Technological Singularity- Rhean**
  + Facts
    - Turing Test
      * When passed, singularity begins.
    - Stephen Hawking & Elon Musk have warned humanity about AI.
    - Technology is a double edged sword.
    - Renewable energy is seeing exponential growth.
  + Positives
    - Increased efficiency
      * Little to no error.
      * Acceleration of quantum computing.
    - Superintelligence
    - Human life possibly extended.
    - Space exploration.
    - AI could design stable fusion reactors
  + Negatives
    - AI does not share human values.
    - Human race is wiped out.
    - Unimaginable horrors
      * AI can understand a human’s worst nightmares.
    - Pop Culture
      * Mass Effect
        + 50,000 year cycle.

All life wiped out.

* + - * Skynet
      * The Matrix
        + Blue pill or the red pill
* **Neuralink/Cybernetics - Clayton**
  + Positives
    - Would allow people with spinal trauma to regain their independence
    - Allows for interfacing with any other cybernetic prosthetic enhancements
    - Would give live access to the internet, through your NeuraLink implant
  + Negatives
    - Issues of personal privacy
    - Would this change humanity fundamentally?
    - Could augment the negatives around current social media
    - Increased dependence on tech
* **Augmented Reality - D’Artagnan**
  + Using machine learning for image recognition and labeling
    - In AR you can look at any object or monument and immediately know what it is (pop-ups?)
    - You can overlay measurements (industry applications)
    - Training (surgeons or operators)
    - Good surveying tool
    - GPS directionality
  + Using super and/or quantum computing for physics processing
    - This allows for simulated possibilities in a “real” physicalized environment
    - “Virtual” ping pong among other sports
* **Machine Learning - Cole**
  + How machine learning is making things better
  + Risk of people losing their jobs?
    - Stock Exchange - Used to be people now all bots.
    - Self driving cars
    - Medical bots
    - Lawyer jobs
    - No job is safe
      * white collar
      * blue collar
      * Creative
      * All can be done with machines
* **Robotics - Zack**
* Assembly
  + Complex manufacturing sectors like aerospace.
  + AI can be used to help a robot learn on its own which paths are best for certain processes while it’s in operation
  + Huge amounts of data are gathered by machines regarding their work. Quantitative analysis allows optimization.
* Packaging
  + Quicker, lower cost and more accurate packaging.quicker, lower cost and more accurate packaging.
* Customer service
  + Used in retail, hotels, etc
  + AI Able to process multiple languages
  + The more these systems can interact with humans, the more they learn
* Automation
  + Short term threat to economy
  + AI is improving faster than biology can match.

**Reference Links:**

* <https://youtu.be/7Pq-S557XQU>
* <https://youtu.be/R9OHn5ZF4Uo>
* <https://www.redalkemi.com/blog/post/pros-cons-of-internet-of-things>
* <https://www.zdnet.com/article/what-is-the-internet-of-things-everything-you-need-to-know-about-the-iot-right-now/>
* <https://neuralink.com/science/>