Part 1: Annotations (37 points)

- Find atleast 7 research papers in your field of research discussed in class.
- Annotate each of them including pointers discussed in class. (30 points)
- Your annotation may have any or all the pointers discussed in class but must include the following: (7points)
 - The paper name, citation, and the format of the citation (IEEE, Bibtex,
 - Endnote, etc.)
 - What is the paper focused on/ research question?
 - How is the chosen paper important?
 - What part/aspect of the paper is important?
 - Which different buckets (key methods/concept/etc) does this paper fall into?

IEEE citations**

[1]X. Zong and Y. Kim, "Transformation of Film Directing and Cinematography through Technological Advancements: Focusing on Ang Lee's Films," International Journal of Advanced Culture Technology, vol. 11, no. 2, pp. 64–72, Jun. 2023

- The paper focused on Ang Lee's films and the role filmmaking technology advancements played in the evolution of his films
- The paper researched the impact innovations in Film technology had on directors' films focusing on the evolution of Ang Lee's films
- This paper is important because it focused on one director and the specific impact innovations in film technology allowed for more to be done in their work
- The parts that I noted were specific instances of film tech evolutions that were introduced in comparison to older films in Ang Lee's repertoire - such as how limitations in CGI technology didn't allow Lee's version of Hulk to be as intricate at Marvel films are today

[2] U. H. FAHAM, ""SIGNIFICANCE OF SOUND IN FILMMAKING AND CHALLENGES FACED BY PAKISTANIS"," New Horizons, vol. 18, (1), pp. 31, 2024/06//. Available: https://libproxy.rpi.edu/login?url=https://www.proquest.com/scholarly-journals/significance-sound-filmmaking-challenges-faced/docview/3059883756/se-2.

- The paper focused on Sound in the filmmaking process and the limitations Pakistanis face in that field not having access to updated audio equipment. But also talked about the success of their "Coke Studio" productions.
- The paper researched the impact sound has in the filmmaking process, specifically on the Pakistani Filmmaking business, along with the challenges currently being faced in that field.
- This paper is important because it focuses on the sound aspect of post-production which not a lot of the rest of my sources touch on specifically.
- The aspects I highlighted mainly are in how Filmmaking tech generally impacted the Pakistani filmmaking world in terms of progress and innovation, along with the important main ideas of the lack of access to new sound production technologies that are more readily available in the West that are not as prevalent in Pakistan.

[3]M. Farina, A. Fedorovskaya, E. Polivtsev, and G. Succi, "Software Engineering and Filmmaking: A Literature Review," *Frontiers in Computer Science*, vol. 4, 2022. [Online].

Available: https://www.frontiersin.org/articles/10.3389/fcomp.2022.884533. DOI :10.3389/fcomp.2022.884533

- The paper focused on the ethical usage of AI in Filmmaking, looking at the recent writer's strike as means to bring it up, but still talking about the significance of AI in the filmmaking process.
- The paper researched the ethical usage of AI in filmmaking the possible reasons why there is an ethical debate in the first place.
- This paper is important because it touches on the subject that people on the Filmmaking world use to villanize AI advancements in filmmaking technology.
- I highlighted mainly aspects of the article that talked about the strike, and the problem of how AI is being villanized when historically it has helped improve the filmmaking process, and I highlighted possible reasons why AI is being villanized such as films that were made where fictional AI systems tried to take over the human race.

[4]Mirko Farina, Arina Fedorovskaya, Egor Polivtsev, and Giancarlo Succi, "Software Engineering and Filmmaking: A Literature Review," *Frontiers in Computer Science*, vol. 4, 2022. [Online]. Available: https://www.frontiersin.org/articles/10.3389/fcomp.2022.884533. DOI: 10.3389/fcomp.2022.884533.

- The paper focused on the Software Engineering side of Filmmaking.
- This paper researched the possibility of Software Engineers being able to use techniques Directors use to create thier films in thier own line of work, programming and vise-versa. They did not conclude much in that study, but they were able to stumble upon how the two fields can be closely connected.
- The paper is important because it made note of how vastly different the two worlds seem yet how they can be so easily connected.
- I highlighted a lot of the realizations made in the article about how separately, the two
 fields are different, but if you focus on filmmaking and technology together, then all the
 possibilities arise on how the two are connected.

[5] S. Spielmann, A. Schuster, K. Götz, and V. Helzle, "VPET: a toolset for collaborative virtual filmmaking," in *SIGGRAPH ASIA 2016 Technical Briefs*, Macau, 2016, pp. 29:1-29:4, DOI: 10.1145/3005358.3005370.

- The paper focused on a specific tech advancement made to help directora collaborate on post-production interfaces
- The paper researched VPET and its projected impact on helping directors collaborate in a more seamless way
- The paper is important because it's a source I have on a specific piece of tech that's been designed for filmmaking and its promising hopes to better the post-production space.
- I highlighted a lot of the specs of VPET and what it can do, and I also made connections on how I know this will impact the world of filmmaking having taken beginner filmmaking courses here at RPI.

[6] V. S. Reddy, M. Kathiravan, and V. L. Reddy, "Revolutionizing animation: unleashing the power of artificial intelligence for cutting-edge visual effects in films," *Soft Computing - A Fusion of Foundations, Methodologies & Applications*, vol. 28, no. 1, pp. 749-763, 2024. Available:

https://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=174601103&site=ehost-live&scope=site&authtype=sso&custid=s9001156.

- The paper focused on the Animation side of filmmaking and post-production and the advancements made on that end to better the final products of cinema
- The paper researched the visual effects used in animated films while focusing on the machine learning algorithms used in those processes.
- The paper is important because it is the main source I have that touches on Animation and special effects editing in filmmaking, so learning about this part of the filmmaking field will broaden my scope of how advancements in technology affect the filmmaking process;
- I highlighted notes the paper made about the growth in animation and its impact on films, how nowadays we are able to make more extravagant pictures with the technological advancements that were made. I also noted the papers exploration of the AI and machine learning that can be used to better this field of filmmaking.

[7] W. Yang et al, "Using an Artificial-Intelligence-Generated Program for Positive Efficiency in Filmmaking Education: Insights from Experts and Students," Electronics, vol. 12, (23), pp. 4813, 2023. Available:

https://libproxy.rpi.edu/login?url=https://www.proquest.com/scholarly-journals/using-artificial-intel ligence-generated-program/docview/2899402015/se-2. DOI: https://doi.org/10.3390/electronics12234813.

- This paper focused on OpenAl's ability to be trained to recommend filmmaking classes to filmmaking students, But still made really good points in its background about the importance of technology and innovation in the world of filmmaking.
- The paper researched OpenAl's ability to recommend filmmaking courses to Filmmaking students
- The paper was not important based on the study, but it ended up being more important on the details inside used to establish background on the importance of innovations in film technology
- As mentioned above the aspects I highlighted were mainly the ones about how film tech advancements has bettered the world of filmmaking rather than how they tried to also see if it could better the world of filmmaking education.