StyleGAN Scribe Notes

Questions:

-> StyleGAN:

- 1. Bonga: Is the loss function of the discriminator for both the generator and input real image?
- Yes
- 2. Prem: Mapping network looks familiar. What does it look like?
- Essentially it's like FiLM (presented in week 4)
- 3. Yao Gu: What does AdalN do here?
- Normalizes mean and variance of feature map
- 4. Ari: Can you clarify what entanglement is
- Two features should remain as they are, separated (eye feature and hair color, you want them to remain as they are)
- 5. Yao Gu: Slide 10: what's Z and W in (b) (c)
- Z is general latent space
- W is intermediate latent space
- 6. Jiuqi: If I have a trained model and I want to change the hair from blond to black, how do I know which vector to change?
- Take all the images of people with blond and black hair respectively and see what features are changing. There's no direct way though

Prem's explanation on the video:

 Hair, background, orientation of eyes, skin tone - how these features are changing, their patterns

-> StyleGAN 2:

1. Ari: Can you clarify what you mean by squeeze/stretch

Code comments/questions:

- 1. Prem: Closure a nice way to structure code
- 2. Prem: training loop should basically look the same as DCGAN right?
- Yes

Appendix (Authors' comments)

Some addition in slide 12 (more explanatory image?)