**CSE541 Computer Vision**

**Prof. Mehul Raval**

**Gaze Tracking**

**Week 5 Report**

| **Name** | **Enrolment Number** |
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| Nityam Dixit | AU2040140 |
| Devyash Shah | AU2040152 |
| Kavan Gondalia | AU2040030 |
| Kush Patel | AU2040137 |

# Tasks Performed in the week

* Annotated the data: We spent time annotating our dataset of eye images with corresponding gaze directions. This process was time-consuming, but necessary to ensure that our models would have accurate training data.
* Decided which algorithm to use: We researched and compared different algorithms for gaze estimation, ultimately deciding to explore both traditional methods and convolutional neural networks (CNN).
* Compared traditional method and CNN: We further investigated the pros and cons of traditional methods and CNN for gaze estimation. We concluded that CNN would likely be the most accurate method, but we also recognized the value of traditional methods.
* Compared ResNet and U-Net CNN architectures: We researched and compared ResNet and U-Net CNN architectures to determine which one would be most suitable for our annotated data and expected output. We considered factors such as accuracy, training time, and model complexity.
* Discussed previously considered methods: We revisited previously considered methods for estimating gaze and discussed their advantages and disadvantages in light of our current research and decided to implement eye movements on a plane: We made the decision to first implement eye movements on a plane, rather than treating the eye's actual shape. We recognize that this may not be as accurate, but it will allow us to make progress in our project more quickly.