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| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| **1** | **Conv3D** | Throws OOM error | **Reduced the batch size from 32 to 16** |
| **2** | **Conv3D** | Training accuracy: 87  Validation accuracy:75  **Issue faced:**  Model was overfitting the data | **Introduced L2 regularization in dense layer** |
| **3** | **Conv3D** | Training accuracy: 92  Validation accuracy:84  **Issue faced:**  Model was overfitting the data | **Introduced one more conv3d layer.** |
| **4** | **Conv3D** | Training accuracy:  Validation accuracy: | **Increase the amount of trainable data/ reduce the filter size** |
| **5** | **Conv3DGRU** | Training accuracy: 65  Validation accuracy:50 | **Increase neurons in dense layer to improve accuracy** |
| **6** | **Conv3DGRU** | Training accuracy:78  Validation accuracy:61 | **Introduce regularization** |
| **Final Model** | **Conv3D** | Training accuracy: 97  Validation accuracy:91 | **Used pre-processing techniques to blur out the background and retain only skin colour.**  **Used regularization.**  **Trainable parameters:** 6,292,101 |

Example of an image that has been preprocessed in final model.

left: Before preprocessing Fig2: After preprocessing 