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EPR402 Project Progress Meeting #9
Project Lab 1

- Discussed the use of discrete gestures VS full hand joint control of virtual object - continuous control of the object using predicted hand joints basically allows infinite gestures – harder to implement to but more desirable and meets proposal specifications and matches intended system use
- Ideal behavior is to manipulate virtual object with hand in front of you – not discrete gestures for up, down, left, right…
- Discussed the neural network hand tracking approach taken originally and its deficiencies – something was wrong with the way the data was being presented to the network using delta values from the center of the hand for each proposal region – something fundamental with the architecture was preventing it from learning
- The classical hand tracking algorithm was shown and its progress discussed along with its OpenGL virtual object integration demonstrated
- The need for enough training data to achieve model generalization was discussed
- The encouraged approach is to take an architecture that works well for joint regression and try it – if it works, try simplify it later
- Discussed the top-down VS side camera view of the scene in which the virtual object will be rendered – the side camera view is better for AR realism and is the intended specification – being able to reach into a scene and manipulate the virtual objects there from the user's visual perspective
- Presentations next week are just the regular demo and progress update – discussing specific issues being worked on and challenges overcome