

Development of Augmented Reality Application

Swathi P¹, Bharathu A², Sindhu Vaardini U³

M.E Students, Department of Construction Management^{1,2}

Assistant Professor, Department of Civil Engineering³

Kumaraguru College of Technology, Coimbatore, India

Abstract: *AutoCAD, SketchUp, Unity, and Vuforia were used to create the augmented reality application. Making the floor plan of each floor of the civil department in AutoCAD and creating a 3d model of the outside and interior using those AutoCAD plans in SketchUp, applying the material to the model, and importing or making the component like door, window, table, board, and so on. Importing the SketchUp model into Unity and verifying that the texture was applied correctly, as well as importing the image target into the vuforia website, which will create a database of the image that can be used as an image target in Unity. Using Cscript, create a first-person perspective character controller and export the project as an application. In Lumion, I'm creating a walkthrough.*

Keywords: AutoCAD

REFERENCES

- [1] <https://www.archdaily.com/tag/> - for augmented reality ideas.
- [2] [https://www.learnarchviz.com/unreal-engine-arch-viz-workflow-of-unity-for-architect.](https://www.learnarchviz.com/unreal-engine-arch-viz-workflow-of-unity-for-architect/)
- [3] <https://academy.allegorithmic.com/> - substance painter.
- [4] [https://library.vuforia.com/articles/Training/getting-started-with-vuforia-in-unity.html-vuforia integrated with unity interaction.](https://library.vuforia.com/articles/Training/getting-started-with-vuforia-in-unity.html-vuforia-integrated-with-unity-interaction)
- [5] [https://docs.unity3d.com/Manual/class-CharacterController.html-character controller for unity.](https://docs.unity3d.com/Manual/class-CharacterController.html-character-controller-for-unity)
- [6] <https://gamedevacademy.org/fps-controller-unity-tutorial/> - unity fps controller.
- [7] [https://lumion.com/blog/faster-3d-rendering-with-6-workflow-boosting-features-in-lumion-10.html-lumion workflow.](https://lumion.com/blog/faster-3d-rendering-with-6-workflow-boosting-features-in-lumion-10.html-lumion-workflow)