GETTING STARTED WITH UNITY, THE VIRTUAL REALITY GAME AND VISUALIZATION ENGINE.

Unity is easy, provided that you have some 3D modeling and animation experience, know the principals of object oriented programming and at least one language, and you can diagram concepts for user controls and their dependencies. Not quite there yet? Don't worry, everyone has to start somewhere.

And everyone starts the same way; install Unity (or CryEngine or Unreal Engine) and a demo scene, then pull it apart examining individual components to see how they work.

An IDE (Integrated Development Environment) like Unity always includes a demo scene because programmers can't be bothered to read the documentation, so the theory goes. Personally, I like reading documentation. It's the first thing I do, followed by practice exercises and tutorials.

Almost everything visual in a Unity game or visualization for VR will use custom 3D models and animation. With Unity you can make simple models like spheres and cubes and 3D fonts, but not much else. So you'll have to make your own 3D models in another program. I use 3DStudio Max exclusively. It's free for college students with an EDU email address. There are alternatives like Blender and Cinema4D where Unity parses their native file formats, too. On the other hand, there are tons of free 3D models available, but if you can't edit the meshes, or their texture, bump, and light maps, then you'll need to learn or find someone who can make the models and maps for you.

Speaking of editing, Unity's native programming language is C#. If you have experience programming in JavaScript, then you can edit existing libraries included with Unity, and write custom classes, functions, and methods. You can also edit existing prefabs and code objects in the many free Unity demo scenes, and from Unity's on-line asset store. The nice thing about coding in Unity is that you'll rarely write anything from scratch what with all of the code objects floating around.

Unity has been around since 2006. Originally a game creation tool for mobile devices, it's grown massively over the years (half of all 3D iPhone games are made with Unity). Point being, you could learn Unity by making a simple phone game or visualization first instead of jumping directly into VR. This is how game design and concept visualization is taught at many colleges and universities.

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http://www.wilcoxmedia.com

3D Game Engines for Virtual Reality:

http://unity3d.com

http://cryengine.com

http://unrealengine.com