What's New in Version 2.11

- 1. Added Kinect photo-booth demo scene, as additional Kinect overlay demo. Courtesy of Sophi Siraj.
- 2. Added Kinect physics demo scene, to show how Kinect tracking and physics can be used together.
- 3. Added optional detection of user gender and age in the fitting-room demo (uses cloud-face-detection).
- 4. Added 'User detection order'-setting to KinectManager, to set up user to player-index assignment.
- 5. Fixed the user-body-blender issue in portrait mode.

What's New in Version 2.10.2

- 1. Fixed Unity 5.4 shader issue in the background-removal demos and components.
- 2. Updated fitting-room demo components, to allow multi-model selection for one user, as well as multi-user model selections. Added more options to ModelSelector-component.
- 3. Updated KinectHolographicViewer-scene to avoid errors, when no user is tracked.
- 4. Added dilate- and erode-iteration settings to BackgroundRemovalManager, to allow fine tuning of filtering users-image artifacts.

What's New in Version 2.10.1

- 1. Updated scripts and components to allow Windows-store builds.
- 2. Updated fitting-room demo scenes and components to allow easier model selection, multiple model categories and other improvements.
- 3. Updated height-estimator demo to allow estimation of body widths at different levels.

What's New in Version 2.10

- 1. Added new KinectAvatarsDemo3 scene, to demonstrate how to use the AvatarControllerClassic-component, as well as the OffsetNode-setting of AvatarConrtoller-component.
- 2. Added holographic-viewer demo scene, to show how to setup a simple holographic view of an object.
- 3. Added user height-estimator demo scene, to detect the user height from depth buffer data.
- 4. Added optional user-blending shader to the fitting-room demos, to allow visibility of body parts and real object in front of the virtual clothing.
- 5. Updated 3rd face-tracking demo, to show user's head above avatar's body.
- 6. Updated interaction manager to support interaction listeners, to simplify the detection of hand grips.
- 7. Updated gesture listeners to work for specific user index, instead of the primary user only.
- 8. Updated estimation of Kinect forearm and wrist orientations, for all 'Allowed hand rotations' modes.

- 1. Added KinectUserVisualizer demo-scene, to present how to show the user personally in the scene, along with first-person interaction with the available scene objects.
- 2. Added KinectPoseDetector scene, to demonstrate how to solve the common pose-detection problem.
- 3. Updated background removal shaders to provide better, blurred edges.
- 4. Extended 2nd background removal demo with one more camera level a halo behind user's head.
- 5. Added 3rd background removal demo, to show how images, objects and effects can be displayed behind the user's silhouette.
- 6. Added 'Textured model mesh'-setting of FacetrackingManager, to allow texturing of the face mesh, either from color camera image or from the faceMaterial's own texture mapped to the face rectangle.
- 7. Updated 4th face-tracking demo the face model now overlays the color camera image.
- 8. Updated fitting-room demos, to use overlay positions over the color camera image.
- 9. Added several new settings of AvatarController to allow finger orientation tracking, color camera overlay of the base joint, and inverted-z movement.
- 10. Added new setting of KinectManager 'Wait time before remove', to prevent sporadic user losses.
- 11. Removed references to OpenCV-libraries. Please from now on, use Direct3D-11 with this package.
- 12. Version 2.9.5 features Kinect-data-server, package upgrade to Unity 5.3.0 and several important fixes.

What's New in Version 2.8

- 1. Added new continuous gesture 'Run', in order to make it easier to detect running in games.
- 2. Added 'Max left right distance'-setting of KinectManager, to limit user tracking left and right.
- 3. Set primary user silhouette color to be always yellow, to be easily noticeable on the user-map.
- 4. Updated 'Compute user map'-setting of KM to be drop-down, providing more refined options.
- 5. Updated KinectGestures to be extendable gesture manager component, instead of static class.
- 6. Added 'Ignore Z-Coordinates'-setting of KinectManager, to provide support for 2D-scenes.
- 7. Added 2nd background removal demo, to show how to put 3d objects in front of the cut-out image.
- 8. Put back 4th face-tracking demo, to demonstrate how to use AUs, to emulate facial expressions.
- 9. Updated user-tracking in KinectManager, to prevent player-index changes of the same user.
- 10. Updated bone orientations filter, to provide better human limits for bone orientations.
- 11. Posted separate package for saving Kinect v2 mocap to fbx-model animation.

- 1. Added body recorder-and-player class and Kinect recorder demo, to allow body data recording.
- 2. Added 3rd overlay demo, to show how the user can draw lines on the screen with his hand.
- 3. Added color-collider demo to demonstrate AR interaction with scene objects.
- 4. Added 2nd gestures demo, to show how to use wheel and zoom-gestures to manipulate a model.
- 5. Added portrait-mode option to the fitting-room demos and background-removal demo.
- 6. Added adjusted-camera-offset setting to the fitting-room demos, to simplify offset minimization.
- 7. Added lean-left and lean-right gestures to the list of ready-to-use gestures.
- 8. Added allow-turn-arounds option to fix user tracking, when he turns around (experimental).
- 9. Updated avatar-controller to support model arm poses, different from the T-pose.
- 10. Updated user-tracking in avatar controller, to stick to the same user.

11. Updated speech-manager to always use the grammar from the Resources-folder.

What's New in Version 2.6

- 1. Added second fitting-room demo scene that overlays a humanoid model over the user's image.
- 2. Added new face-tracking demo that overlays a hat over the user's head.
- 3. Added new face-tracking scene that tracks and displays user's face as a texture on screen.
- 4. Added second avatars-demo for tracking first-person shooters.
- 5. Added second interaction-demo for grabbing and turning a cube with hands.
- 6. Added option to show single user in the background-removal manager.
- 7. Added option to use dynamic grammars and rules in the speech-recognition manager.
- 8. Added tooltips to all public settings of the Kinect managers, scripts and samples.
- 9. Added code documentation to all public functions of the K. managers (demos will follow suit).
- 10. Added OpenNI2-sensor interface for Windows (experimental, Mac-interface will come out soon).
- 11. Fixed AvatarScaler-issue that scaled arms and legs disproportionately.

What's New in Version 2.5

- 1. Utilized shaders in Directx3D-mode to increase performance 'Use Direct3D 11'-player setting must be enabled. If it is disabled, no shaders are used and the image processing works the same way as before.
- 2. Added second face-tracking demo, to visualize the Kinect-generated face model over the user's face.
- 3. Added visual gesture manager for VGB gestures, and a sample VG-listener to the gestures demo.
- 4. Added 'Auto height angle'-setting to KinectManager, to allow auto-setup of the sensor's H&A.
- 5. Added 'Move rate'-setting to AvatarController, to allow faster or slower avatar movement.
- 6. Added 'Offset node'-setting to AvatarController, so avatar can move or rotate relative to another object.
- 7. Updated avatars in the AvatarsDemo to obey to physics, in means of collisions, gravity, etc.
- 8. Moved all demo scenes to KinectDemos-folder.

- 1. Added fitting-room demo scene, to demonstrate how 3d-models can overlay the color camera stream.
- 2. Added second overlay demo scene that includes overlaying of all skeleton joints and bones.
- 3. Added multi-scene demo, to demonstrate how the Kinect-related scripts might be reused across the game.
- 4. Updated background removal demo scene to provide a smoother background removal.
- 5. Added 'Late update avatars'-option to the KinectManager, to enable AvatarController updates during LateUpdate(). This is needed for integration with Mecanim animations.
- 6. Updated bone-orientations filter to filter out some unnatural bone orientations.
- 7. Multiple little updates, fixes and improvements.
- 8. Upgraded package to Unity 5.0.

What's New in Version 2.3

- 1. Added depth-collider demo scene, to demonstrate the mapping of the Kinect space and depth coordinates to Unity world coordinates, and how this can be used for VR collisions.
- 2. Added simple background removal demo scene. A smoother background removal is in development.
- 3. Added sensor 'Hint height and angle'-setting to KinectManager, to provide information about the actual height and angle of the sensor (works only when there are users detected).
- 4. Added 'Gestures debug text'-setting to KinectManager, to make the development of gestures easier.
- 5. Added detection of four new gestures LeanLeft, LeanRight, KickLeft and KickRight.
- 6. Updated detection of the available gestures, to make them more robust and easier to use.
- 7. Grouped native resources, depending on the supported sensor and used architecture.

What's New in Version 2.2

- 1. Added speech recognition manager and speech recognition demo scene.
- 2. Improved head tracking, wrist/hand tracking and AllowHandRotations-option.
- 3. Added PointCloudView-demo script to show the Kinect camera view in 3d.
- 4. Updated GetJointPositionDemo-script to save the joints positions into csv-file.
- 5. Updated KinectOverlayer-script to mirror the joint rotation along with the position.
- 6. Improved Cubeman's joint orientation tracking. No more need for Ctrl-object.
- 7. Improved first run after standalone build. Fixed SharpZipLib-codepage issue.

What's New in Version 2.1

- 1. Added face tracking manager and demo scene, working for both Kinect v2 and Kinect v1.
- 2. Added support for x32 and x64 architectures at run-time.
- 3. Added AvatarControllerClassic-component to allow manual assignment of bone transforms. Big thanks to Aaron Brooker!
- 4. Added automatic scan for gesture listeners in the scene.
- 5. Added option to AvatarController, to have offset relative to the sensor. Big thanks to Claudio Rufa!
- 6. Improved Zoom-in, Zoom-out, Wheel and Stop gestures. Big thanks to Shamil Bugdabayev!
- 7. Updated to Kinect-Unity plugin v.1410.

- 1. Added support for various depth sensors, currently Kinect v2 and Kinect v1.
- 2. Updated AvatarController to use the Mecanim configured bones. Big thanks to Mikhail Korchun!
- 3. Added reasonable constraints to the calculated bone orientations.

- 4. Added left-hand press and right-hand press detection to the InteractionManager.
- 5. Added function to set the primary user ID.
- 6. Added multi-source reader option (supported by Kinect v2 only).
- 7. Added parameter to set the image-map onscreen width as percent of the window width.
- 8. Updated KinectOverlayDemo to be full screen.

- 1. Added new Kinect-overlay demo scene green ball, following user's right hand on a video wall.
- 2. Added simple GetJointPositionDemo-sample, as a pattern to be used in custom scripts.
- 3. Added sample colliders to the avatars in KinectAvatarsDemo-scene.
- 4. Added maxUserDistance-setting to KinectManager, as suggested by Eugene Cone. Thank you!
- 5. Added sensorAngle-setting to KinectManager, as required by many users.
- 6. Added PlaymakerKinectActions, utilizing several Kinect v2 features in Playmaker environment.
- 7. Several updates, improvements and fixes of bugs and issues, reported by package users.