

# CAVELibWrapper: Development of a CAVELib Compatible Library for HMD-type VR Systems

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A C++ library is developed to facilitate porting the application software for CAVE-type VR systems to HMD-type VR systems (Oculus Rift and HTC VIVE). It is developed using Oculus SDK and OpenVR, and it emulates the function calls of CAVELib which is a commercial library for developing application software executable on CAVE-type VR systems. By using this library, users can develop application software for HMD-type VR systems by a function name same as CAVELib and it is possible to develop programs for CAVE-type VR systems and HMD-type VR systems with almost the same source code. As an example, porting of VFIVE which is an interactive visualization software for CAVE-type VR systems is introduced. Furthermore, other examples of software porting using this library will also introduces.

Keywords: visualization, virtual reality, software development