

The work performed at VT under the NAVCIITI project has had an invaluable impact on the Navy's initiatives to assess virtual reality technology within the context of warfighter needs. These needs include tactical, training, and planning operations. VT has developed a unique application tool called DIVERSE which provides a versatile backbone for combining a broad spectrum of applications and interface devices, and will soon be extended to an Open GL version, which will allow the software to run on a broad spectrum of machines from UNIX to SG to LINUX PCs. This will facilitate the Navy's ability to get VR programs and devices operational on shipboard and submarine systems quickly. A specific beneficiary of the work conducted under NAVCIITI funding is a program entitled "Visualization for Multiwarfare Planning and Execution" - an Office of Naval Research (ONR) funded effort led by the Naval Undersea Warfare Center and the Naval Research Laboratory. This project rated as ONR's best C4I project at their May 2001 review, specifically addresses the "value added" of 3D visualization and VR in the context of the submarine passive localization problem. In FY03 this program will evolve into a Future Naval Capabilities (FNC) effort aimed at developing a 3D VR-based sensor-to-shooter decision aid for submarines. Without the support of VT and specifically the NAVCIITI project, which laid the necessary groundwork and developed the necessary expertise at VT, this project would neither have evolved as quickly as it has and would not have had the tool (DIVERSE) we are using to assess VR options or to integrate VR technology into the current UNIX-based Navy submarine combat system (Open GL DIVERSE). VT has done an excellent job under NAVCIITI support in furthering the state of the art in virtual reality, has developed an outstanding VR tool in DIVERSE and has developed outstanding scientists who have made significant contributions to Navy programs.*

*VT's work under NAVCIITI funding has also resulted in a transition to a current NAVY FNC program on undersea weapon connectivity.

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