PLATFORM INDEPENDENT GAME ENGINE

by

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of the requirements for the degree

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APPROVAL

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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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___________________________________________

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Dedicated to my
Great Aunt Betty Armstrong
VITA

Chad Wesley Armstrong was born in Longmont, Colorado on November 17, 1977. He is the firstborn to Donald and Dawn Armstrong. He grew up in Great Falls, Montana and lived there until 1996 when he moved to Bozeman, Montana to attend Montana State University. Four years later he received a Bachelor's degree in Computer Science and a Minor in German. He continued on to graduate school at Montana State University where he completed his Master’s degree, also in Computer Science.
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ABSTRACT

The Platform Independent Game Engine (PIGE) has been designed as a set of tools to easily allow a developer to create a game which can be ported to multiple computing platforms with relative ease. PIGE makes use of cross-platform programming tools such as OpenGL, OpenAL, and the C language.

This gaming engine is separated into two main sections, the core code and the operating system specific header files. The core source code is platform neutral and requires no true modification when compiled and run. However, due to small inconsistencies between platforms, particular areas of PIGE require some functions to be written or modified for a particular operating system. This is where the OS specific header files come in, which are included and removed, depending on which system is running PIGE.