**Abstract**

Tec is a cross-platform game engine, written in C/C++, that abstracts away the hardware layer from game development and provides a uniform, modular, extendable, and easy to use interface for developers.

**Benefits**

- **Developers**
  - No need to worry about hardware eccentricities
  - Rapid feature development
- **Designers**
  - Cross-Platform design out of the box
  - LUA scripting to handle hardware settings and game mechanics
- **Consumers**
  - Play multiplayer games across supported platforms
  - Save a game on one platform, load from another

**Design**

- **Modularity**
  - Games Controller
  - Singleton Class
  - Contains the main game loop and provides interoperability between the game managers
- **Manager Classes**
  - Layer of platform independence
  - Encapsulates similar game logic and functionality into composite groups
  - Can access other managers through the Game Controller
- **Modules**
  - Provides an extendable interface for feature addition
  - Test driven feature development
  - Platform specific handling

**Leveraged Open-Source Technology**

- **SDL:** Input and Windowing Library
- **TinyXML:** XML I/O Library
- **Tiled Integrated Map Editor**
- **Box2D:** Integrated Physics Library
- **LUA Scripting Language**
- **OpenGL:** Graphics Library
- **Zlib:** Data Compression Library
- **OpenAL and OGG Vorbis:** Audio Support

**Screenshots and Games**

Tec is a student run game design and programming competition using the Tec Engine.

**More Information and Videos**

- **Company Website**
  - [http://www.liquidmetalgames.com](http://www.liquidmetalgames.com)
- **Open-Source Repository**
  - [http://code.google.com/p/tec-engine](http://code.google.com/p/tec-engine)
- **Game Competition**
  - [http://www.tecathon.com](http://www.tecathon.com)

**The Future**

- Tec is constantly evolving project. Its modular design allows expansion to new markets and platforms.
  - Windows Mobile 7 with DirectX Support
  - Xbox Live Arcade
  - Web Applications with Amazon Services
  - And many more...