

Thompson Lee

asperatology@gmail.com • 26 Wachusett Street #303, Worcester, MA 01609 • (978) 942-9338

Portfolio: <https://asperatology.me> • **Github:** <https://github.com/tomma78101>

Objective

Full-time positions in software engineering / software development.

Summary

- Experienced software developer focused on tools and applications in C++, Java, C#, and Python 3.
- Developed tools to work closely with hardware devices and software applications.
- High interests in collaborations in team-based projects, and works closely as a team.

Skills

Programming: C++, C, Python 3, Visual C#, Java, JavaScript/UnityScript, LUA, SQLite 3

Tools/Libraries: Unity, Unreal Engine 4, SDL, Visual Studios, GCC, Eclipse, HxD, Android Studio

Applications: VirtualBox, VMWare, GIMP, GraphicsGale, Audacity, Camtasia Studio 8, Fraps, Adobe Photoshop CS6/CC, Corel Draw X4, Ubuntu 16.04 LTS, Windows Subsystem for Linux

Foreign Language: Chinese (Mandarin, Fluent, Second Language)

Projects (sorted by date)

Independent Project: Citro3D Graphics / Physics Engine, June 2016 – October 2016

- Ported qu3e C++ open-source physics engine to Nintendo 3DS devices.
- Developed in C as a 3D physics engine for Nintendo 3DS, with permission from qu3e owner.
- Implemented the engine to work with Citro3D graphics library, which is based on OpenGL graphics library.

Independent Project: Multithreaded Plugins-based IRC Bot Client, May 2016 – June 2016

- Developed custom IRC bot in Python 3, providing channel services for online chat channels.
- Implemented hot-reloading plugins system to allow reloading modified plugins into the bot on the fly.
- Written custom plugins to demonstrate bot client features, such as displaying emoticons, auto-reply, and more.

Master of Science Thesis: Multiplier: Real-time Strategy Unit Balancing Game/Tool, July 2015 – May 2016

- Designed new approaches to balance game units for real-time strategy games with mathematics.
- Applied debugging productivity to single player, network multiplayer, and simulation modes with Unity3D in C#.
- Garnered positive reception from over 50 players.

Independent Project: Twitch Plays Pokémon Input Bot, February 2015 – February 2015

- Performed generations of random inputs and commands to the Twitch.tv livestream chat in C with Win32 API.
- Designed with extra features as a key input generator for buzz-fuzz debugging and other entertainment purposes.
- Used as an input tool for the popular web game, Agar.io, for disrupting anti-cheaters by feeding in-game viruses.

Independent Project: Pokémon Walking, December 2013 – July 2014

- Developed 2D role-playing game, level map editor, and scripting editor tool in Java with Swing UI.
- Gave players the ability to create custom levels and game trigger events, using a preset of default assets provided.

Major Qualifying Project (MQP): Marble Run, September 2012 – May 2013

- Utilized the accelerometers and gyroscopic sensors inside Android devices for a 2D platformer game in Java.
- Applied motion controls for video game; Caught attentions from players and professors at a tech demo showcase.

Independent Project: Bluetooth 5-way Relay Chat, January 2013 – February 2013

- Implemented a server/client network chat message relay using up to 5 Android devices in Java.
- Used Bluetooth to demonstrate peer-2-peer sending and receiving messages concurrently and simultaneously.

Education

Master of Science in Interactive Media and Game Development, focused in Software Development

Worcester Polytechnic Institute (WPI), GPA: 3.62, May 2016

Bachelor of Science in Computer Science and Information Engineering

National Taitung University (NTTU), GPA: 4.00, July 2013

Work Experience

Student Lab Administrator, Worcester Polytechnic Institute September 2015 – May 2016

- Maintain software and facility hardware, troubleshoot technical issues, assist students and faculty members.

Officer, National Police Agency August 2013 – July 2014

- Conscripted/Military Service. Assist the police in handling riots and de-escalating hostile situations.

Activities

- Participated in WPI Game Development Club, and has attended PAX East 2015 to showcase game demos.
- Participated in WPI Pool Club, and has competed in a pool tournament sponsored by WPI Pool Club.