

# Gordon Lee

Software Engineer /  
Tools Engineer

# Résumé

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## SUMMARY:

- 5+ years experience with C/C++
- 4+ years experience with Unity3D
- 1+ years experience with Python
- 1+ years experience with SQL
- 2+ experience with WPF/XAML
- 5+ years experience with C#
- 2+ years experience with Qt
- 1+ years experience with Java/JSON
- 3+ experience with LUA

## WORK EXPERIENCE:

**Harebrained Schemes**, Kirkland, WA  
Software Engineer / Tools Engineer

Summer 2011 - Summer 2016

**Necropolis** (Windows / Mac / PS4 / Xbox One)

Partnership with **Bandai Namco**

- Worked on gameplay features like stats, traits, combat calculations, input, objectives, and enemy behavior to make them feel unique.
- Made the animation system using Unity's Mecanim and worked with animators and designers to tie together combat data and animations.
- Implemented enemy combat AI and their state machines with some work on their pathfinding and NavMesh.
- Worked on tools for designers to get data into the game.
- Helped with getting some networking features up and running like projectiles and objectives.
- Technologies used: C#, Unity3D, Google Spreadsheets, JIRA, Git

**Golem Arcana** (iOS / Android)

Kickstarter

- Implemented use of Google API for designers to create data into the cloud and then parse into JSON.
- Made the process to automate the creation of paper materials such as the cards and base stickers from data for the print factories.
- Worked on UI of out-of-game menus and in-game menus.
- Helped to implement the gameplay and abilities that Golems, Knights, Relics, and Ancient Ones use.
- Technologies used: C#, Unity3D, JSON, SVG, HTML, Google API, Git

**Shadowrun: Dragonfall** (Windows / Mac / Linux)

Kickstarter

- Implemented new features.
- Lots of bug fixing in all areas of the game.
- Technologies used: C++, Qt, C#, Unity3D, ProtoBuf, Python, ANT, SVN

**Shadowrun Returns** (Windows / Mac / Linux / iOS / Android)

Kickstarter

- Implemented Google Protocol Buffers (ProtoBuf) in editor C++ and Unity3D game C# for all game data.
- Worked in Qt C++ to help build the level editor, the prop editor, character editor, and conversation editor.
- Worked in Unity3D C# on the sound manager, animation controllers, fog of war, visibility casting, and UI.
- Implemented most of the UI such as conversations, main menu, PDA, store, equip, hiring, level up.
- Technologies used: C++, Qt, C#, Unity3D, ProtoBuf, Python, ANT, Git

## **Strikefleet Omega** (iOS / Android)

Published by **Six Waves**

- Implemented most of the UI, main menu, store screens for iOS and Android platforms.
- Helped on integrating the use of Google Spreadsheets to automatically update game design features and mechanics.
- Hooked up achievements and other mobile device features.
- Worked on various features such as warping ships in, mining, asteroids, touch input, game loop, resolution resizing.
- Technologies used: LUA, MOAI, Java, iPad, iPhone, Kindle, Android, Google Spreadsheets, ANT, Git

## **Crimson: Steam Pirates** (iPad)

Published by **Bungie Aerospace Corporation**

- Built the entire level editor in WPF and C# that all designers used to make all the levels.
- Level editor can place and edit player ships, place terrain, create locations, paths, flags, and create triggers for game logic.
- Implemented most of the game shell and UI such as main menu and detail cards.
- Wrote much of the trigger-based game logic.
- Worked with Bungie's test team to fix bugs.
- Technologies used: C#, WPF/XAML, OpenGL, iPad, LUA, MOAI, SVN

**Go Go Kiddo**, Bellevue, WA

Spring 2011

Software Engineer / Tools Engineer

## **Go Go Kiddo** (iPad)

- Built various tools and editors using WPF/XAML, C#, OpenGL, and Box2D.
- Built a level editor for a 2D physics simulation game. The level editor included working simulation of game physics to test levels within the editor. Imported and exported levels, objects, and animation data to LUA. Fully customizable objects using the editor.
- Built a tracing editor for a number and letter tracing game. The tracing editor used spline creation and editing, and included demo tracing and user tracing simulation.
- Made the number and letter tracing game in LUA using MOAI for mobile platforms.
- Technologies used: WPF/XAML, C#, LUA, Java, OpenGL, Box2D, MOAI, iPad, SVN

## **EDUCATION:**

**DigiPen Institute of Technology**, Redmond, WA

2006-2010

Bachelor of Science in Real Time Interactive Simulation with a Minor in Math

## **SKILLS:**

- **Programming Languages:**
  - Proficient in C/C++, C#, LUA, WPF/XAML
  - Familiar with Python, Java, JSON, SQL, ProtoBuf, HTML
- **Tools and Systems:** Unity3D, Qt, Microsoft Visual Studio, MonoDevelop, SVN, Git, JIRA, Google API
- **Programming:** Engine architecture, tools, game play, UI, animations, audio, networking, data structures, algorithms, vector math, 3D collisions, picking, path finding
- **Testing:** Ad hoc, stress, boundaries, load, inaccessibility, functionality, localization, BVT
- **Social:**
  - Worked in small teams of 10-25 people and has been lead engineer on projects
  - Code reviews with other engineers
  - Worked closely with other engineers, game designers, animators, modelers, riggers, environmental artists to figure out what we can and can't do or alternatives and in what time