# Ben Deane

Principal Software Engineer



I geek out on C++, functional programming, languages, Linux, emacs, network programming, systems architecture, simplicity.

# Experience

# 2014–2015 Principal Software Engineer, Blizzard Entertainment, Irvine, CA.

As a Principal Software Engineer, I am both an individual contributor on the Battle.net team and a strategic contributor to Blizzard's companywide engineering culture and knowledge.

As an individual contributor on a team (my "day job"), I:

- o help to ship and support the Battle.net Desktop App.
- o own the communication and integration with Battle.net's servers, particularly the areas of authentication, configuration, friends and presence.
- o architect, implement and document systems and APIs, and fix bugs of course.

As a strategic contributor to Blizzard (my "principal duties"), I:

- o give regular presentations on a variety of technical topics.
- o run workshops on engineering techniques and tools (e.g. Test Driven Development).
- o coordinate internal "engineering lightning talks", helping engineers to gain presentation skills and spread knowledge.
- o created and moderate two internal mailing lists ("Good Code" and "C++").
- o co-lead Blizzard's mentorship program for Computer Game Science students at UCI.
- o give talks at conferences and universities (e.g. my talk on Testing Battle.net).

I often field questions from engineers, particularly about architecture, C++, and git usage.

#### 2010–2014 **Lead Software Engineer**, *Blizzard Entertainment*, Irvine, CA.

I led the team that architected and built the Battle.net service and client libraries that are currently used by *Diablo III*, *Hearthstone*, and the Battle.net Desktop App.

In this role, I:

- o managed a team of 3-6 (it changed over time) engineers.
- o architected the social systems and routing infrastructure of the Battle.net server cloud.
- o architected and implemented the client APIs used by the game teams.
- o architected and implemented queueing and game allocation among available game servers.
- o architected and implemented the cooperative matchmaking service for *Diablo III*, a system that handles on the order of a million open games at one time.
- o handled live ops for my team's Battle.net systems.

# 2008–2010 Lead Software Engineer, Blizzard Entertainment, Irvine, CA.

I led the team that architected and built the Battle.net client libraries that are currently used by StarCraft II, Heroes of the Storm, and World of Warcraft.

Yes, this is a different incarnation of Battle.net than the one that shipped with *Diablo III*. However, the role was much the same. My team of 6 engineers focused on building the Battle.net client libraries, and UI for *StarCraft II*. Among other things, I built social systems, wrote the system to download and cache data on the client, and implemented an ActionScript-to-C++ FFI and data marshaling system.

## 2005–2008 Lead Software Engineer, Electronic Arts, Playa del Rey, CA.

I led a team building *Tiberium*, a hybrid FPS/RTS in the *Command & Conquer* universe using the Unreal 3 engine, and developed on PC, Xbox 360, and PS3. Among other things I did extensive work on improving the lighting, and on threading and optimization. In October 2008, EA cancelled the project.

## 2003–2005 **Senior Software Engineer**, *Electronic Arts*, Playa del Rey, CA.

I was lead of the subteam building the network game for *Goldeneye: Rogue Agent*, an FPS that shipped on Xbox and PS2. I implemented the core of the network game, working with a remote team in Montréal that was building levels and adding features.

#### 2001–2003 **Software Engineer**, Kuju Entertainment, Godalming, UK.

I gained console experience on PS2 at Kuju, acting as lead engineer during the finalling stage of *Reign of Fire*, and then taking a role as network lead for *Warhammer 40,000: Fire Warrior*, which was one of the first titles to support the PS2 broadband adaptor.

# 1995–2001 **Software Engineer**, *Bullfrog/Electronic Arts*, Guildford/Chertsey, UK.

As a jack-of-all-trades engineer, I tackled many tasks: gameplay, systems, tools, UI, networking, localization, audio. My specific area of expertise became networking. I also got a lot of experience with localization and UI work.

# Miscellaneous skills

Expert C++, git

Intermediate Python, Haskell, JavaScript, Unix, Lisp, French

LATEX, maths, tiddlywinks

#### Education

#### 1992–1995 MA (Cantab) Computer Science.

Emmanuel College, University of Cambridge

# The Boring Stuff

I am a UK citizen and a US Permanent Resident ("green card" holder). References available on request.