# Andre Duvoisin

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#### **EDUCATION**

B.S. Computer Science (Games), University of Southern California

GPA: 3.85

#### **EXPERIENCE**

Blizzard Entertainment (C++, Java, Node.js, Swift, Python), Software Engineer 2016 – Present

- Created, architected, and shipped a GraphQL edge service in Java that orchestrates data from multiple REST APIs. Contributions include core functionality, OAuth2 authentication, Jenkins build and AWS deployment pipelines, in-memory caching layers, monitoring, and analytics
- Architected and shipped a publishing pipeline from the Heroes of the Storm and Hearthstone game servers in C++ to publish player profiles, turn-by-turn game statistics, and end-of-game statistics to an external API using REST, HTTP, RabbitMQ, and Protobuf
- Shipped the Battle.net Messenger iOS app with contributions including core UI functionality, XMPP server integration, network connection management, and localization pipeline
- Ported a C++ SDK to iOS with a Swift interop layer to prototype mobile social feature viability
- Added features to the World of Warcraft and Authenticator iOS apps in Objective-C and Swift
- Shipped two Python web applications to aggregate and transform JSON data for a REST API

# Blizzard Entertainment (C++, Qt, IPC), Software Engineer Intern

2015

- Created a desktop app demonstrating voice chat feature implementation for SDK consumers
- Built out voice chat features in the Battle.net app from the UI to the low-level social engine

Blizzard Entertainment (C++, Qt, Linux, Python, HTTP), Software Engineer Intern

2014

• Iterated upon a data visualization tool analyzing network traffic for the Battle.net downloader

#### **PROJECTS**

Composite Engine (C++, OpenGL, JavaScript) git.io/CompositeEngine

2017 - Present

- Creating a game engine in C++ with OpenGL on Windows and Mac with a CMake build system
- Implementing a graphics engine including rendering, texturing, skinning, and animations
- Creating an animation processing tool to import via FBX SDK and export to a custom format
- Integrating Chromium Embedded Framework (CEF) and creating a user interface in JavaScript
- Implementing an event system to marshal events between encapsulated engine systems

### Piston Shooty (Rust) git.io/piston shooty

2017 - Present

· Creating a 2D puzzle game including main menu, gameplay, level editor, audio, and UI

Chambara (C# with Unity3D, Node.js) <a href="mailto:chambaragame.com">chambaragame.com</a>

2015 - 2016

- Ported to PS4 and Xbox One including controls, achievements, localization, and accessibility
- Created a build and deploy system with Jenkins to manage a cross-platform game
- Architected a platform for player profiles, matchmaking, and game server management

## **Polyseum** (C++ with Unreal Engine 4) polyseum.com

2014 - 2015

• Implemented core networked multiplayer gameplay features for a first-person shooter including chat, status effects, game flow, spectator mode, reconnecting, and dashing

The Maestros (UDK, HTTP, TCP, Flash) maestrosgame.com

2013 – 2016

- Integrated against a platform API to form a robust lobby and character select system
- Created UI for the main menu and in-game HUD overlays using Scaleform GFx

# **SKILLS**

**Game Engines**: Unreal Engine 4 (UE4), Unity3D, Unreal Development Kit (UDK)

Languages: C++, Java, JavaScript, Node.js, Swift, Python, C#, C, OpenGL, Rust, SQL Technologies: iOS, Mobile, GraphQL, OAuth2, AWS, Jenkins, HTTP, TCP, UDP, SIMD