Tyler Befferman

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Summary

Self-motivated software engineer experienced with game engines and enterprise web applications seeking career opportunities in software development.

Education

Hofstra University - Hempstead, NY

September 2012 - May 2016

Bachelor of Science, Computer Engineering

• GPA: 3.82

• Dean's List: All semesters

Skills

Languages: C#, SQL, C++, PHP, Lua, Python, Java

Tools: Visual Studio, Unity3D, Source Engine, Atlassian Stack, Azure DevOps

Experience

Tools Developer - Momentum Mod Team

October 2022 - Present

- Created a C# tool for converting levels from Quake 3 Arena to Source engine
- Received a license from Valve in order to make modifications to the Source engine's renderer and game logic (C++)

Lead Developer - Turbo Force

December 2012 - October 2022

- Solo development project made with Unity3D and released on Steam Playtest
- Created anti-gravity vehicle controller with custom physics and collision detection
- Level editor uses Bézier splines to procedurally generate race tracks
- Networked multiplayer utilizes client-side input prediction to reduce latency, snapshot interpolation to smooth player motion, and packet delta compression
- PHP/MySQL back-end for leaderboard system and replay sharing
- Custom glTF importer tool for importing 3D assets at runtime
- 50,000 + lines of code

Software Developer - Mortgage Cadence / Denver, CO $\,$ January 2020 - December 2021

- Full stack web development on a large scale code base for loan origination services
- Replaced legacy Silverlight software with AngularJS based web application
- Utilized GraphQL extensively to communicate with C#/T-SQL backend
- Created automated unit tests to replace manual testing for loan compliance

Software Engineer - Valiant / Woodbury, NY

August 2016 - June 2018

- Developed and maintained ASP.NET MVC based payroll software using test driven development
- Optimized a complex security permissions system, resulting in significantly improved performance on most actions within the application
- Created and enforced coding standards and performed code reviews
- Utilized tools such as RabbitMQ, Redis, Xamarin, Firebase, Entity Framework, SQL Server, Code Generation, and Atlassian Stack

Research Assistant - Hofstra University

Fall 2014 - Spring 2016

- WISEngineering project sponsored by the National Science Foundation
- Implemented a distributed short answer grading system (Java, Hadoop, ZooKeeper)
- Created Android shell scripts for automating app installation on new devices

- \bullet Implemented user behavior tracking by monitoring keyboard and mouse events with jQuery, PHP, and MySQL
- Used Google Analytics API to monitor web traffic

Software Development Intern - OpenLink / Uniondale, NY Summer 2015

- Created an ASP.NET web app that displays performance metrics for build servers
- \bullet Debugged and resolved issues with test automation software in C#
- Coded a multi-threaded GUI program to update file formats