Tyler Befferman

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Objective

Self-motivated software developer experienced with web application development and game engines 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#, Java, SQL, C++, PHP, Lua, Python
Software: Visual Studio, SQL Server Management Studio, Atlassian Stack, Unity

Experience

Software Engineer - Valiant / Woodbury, NY — August 2016 - June 2018

- Contributed towards 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, 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
- 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
- Debugged and resolved issues with test automation software in C#
- Coded a multi-threaded GUI program to update file formats

Projects

Turbo Force — December 2012 - Present

- Anti-gravity racing game with a spline based track editor using Unity engine (C#)
- Networked multiplayer utilizes client-side input prediction, snapshop interpolation for smooth playback, and packet delta compression
- Robust AI controlled racers navigate using procedurally generated waypoints
- PHP/MySQL back-end for record tracking and replay sharing
- Custom glTF importer for importing 3D assets at runtime
- Editor UI system automatically saves and loads object properties using reflection
- 40,000+ lines of code

OpenGL Roller Coaster Editor Fall 2015 - Spring 2016

- Generates roller coaster tracks using Bézier curves
- Uses the OpenGL API (C/C++) to render scenes
- Utilizes the Assimp API to import 3D models from external applications
- Reduced geometry stretching from path deformation by using arc-length parameterization