

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 Bachelor of Science, Computer Engineering <ul style="list-style-type: none">• GPA: 3.82• Dean's List: All semesters	September 2012 - May 2016	
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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Anti-gravity racing game with a spline based track editor using Unity engine (C#)• Networked multiplayer utilizes client-side input prediction, snapshot 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
- Reduces geometry stretching from path deformation by using arc-length parameterization