

# Cavaughn Browne

4700 Taft Blvd, Apt# 152,  
Wichita Falls, TX  
(940) 882-2298 [cxbrowne1207@gmail.com](mailto:cxbrowne1207@gmail.com)  
<https://github.com/LegendaryZReborn>  
<http://cavaughnbrowne.com/Mwsu-2D-Gaming-Browne>

## Education

- Midwestern State University(MSU), Wichita Falls, Texas.
  - B. S. Computer Science. **GPA: 4.0 - Anticipated Graduation Date:** May 2018

## Skills

**Programming languages:** OpenGL, C++, C#, Python, HTML, CSS, JavaScript, MySQL, PHP.

## Projects

### *Interactive Computer Graphics*

- Created simple model viewer (Using **OpenGL** with **C++**, GLUT, ANGEL library).
- Terrain rendering from a height map with water simulation around it.
- Implemented a flying camera for first person exploration.

### *Test Case Suite Application*

- Developed **C#** Windows Form Application to test code.
- Parses C++ source code; suggests appropriate test cases & drivers to the user.
- Worked as **team leader** applying **Software Engineering principles (Agile process model)**.

### *Inventory Application*

- Developed a Windows **C#** application using a **Multiple Document Interface(MDI)** for keeping inventory for multiple businesses.

### *The Fast Fourier Transform (Cooley-Tukey Algorithm)*

- Implemented **Fast Fourier Transform** radix-2 DIT case (**C** & **Cuda**).
- Compared & measured improvement in efficiency between **C** & **Cuda** implementation.
- Code compiled & executed on Texas Advanced Computing Center's Maverick with 132 NVIDIA Tesla K40 GPUs.

### *Personal Website*

- Built website for holding personal projects, applications, & resume with **HTML**, **CSS**, **JavaScript**.
- Working on developing a blog with content management system (**PHP** & **MYSQL**).
- Planning to incorporate a forum.

### *Brick Breaker Game*

- Developed 2D brick breaker game with different levels in **Unity 3D** using **C#** scripts.
- Published on the Google Play App Store.

### *Super Diamond Box Platformer Game*

- Developed web page games using the **Phaser HTML5** 2D game framework & **JavaScript**
- Configured for play on mobile devices.

## Research & Experience

- "Virtually Bolin" Team Research Project
  - Creating a **virtual reality** experience of Bolin Science Hall at MSU using the Oculus Rift.
  - Created models using Blender & wrote scripts in **C#** for use in **Unity3D**.

- Programming Team
  - Participated in the ACM-ICPC South-Central Region Programming Contest 2016
  - Solved over 50 problems on the UVA Online Judge website.
- Computer Science Lab Tutor
  - Tutor Computer Science students & help them with their projects.

#### **Awards & Activities**

- Midwestern State University's 2017 Hardin Scholar Finalist
- Midwestern State University's 2016 Clark Scholar Finalist
- Louie Huffman Computer Science Scholarship 2017
- Presidents Honor Roll: Fall 2014 - 2016, Spring 2015 - 2017
- **Senator**, Association of Computer Machinery at Midwestern State University.