

# RYAN FOLZ

## PORTFOLIO

Please visit <http://ryanfolz.com> for pictures and details of the projects with links beside them.

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### **Go Back** — *Self-Made Engine, Java*

<http://bit.ly/2gNfzvN>

- Sept 2016 - Dec 2016
- Created independently to learn how to make a 2-D game engine.
- Use your past self and defeat hedgehogs to find a gem that will let you travel back in time to save your lover.
- Created the entire game and game engine from scratch.

### **Virtual Reality Osmos** — *Unreal Engine, HTC Vive*

<http://bit.ly/2gm92EQ>

- Oct 2016 - Nov 2016
- Created independently to learn Virtual Reality development.
- Use the left controller pad to move your character around.
- Reach down and grab a ball to absorb it and increase your size.

### **Text Self Portrait** — *Photoshop*

<http://bit.ly/2fB0Tj2>

- Oct 2016
- Created in Graphic Design for education.

### **Personal Website** — *HTML, CSS, Atom*

<http://ryanfolz.com>

- Sept 2016 - Dec 2016
- Created independently for publication.
- Uses HTML and CSS to create a personal website to showcase projects.

### **RGB Gradient Wallpaper** — *Android, Java*

Play Store: [goo.gl/wLUqZf](https://goo.gl/wLUqZf)

- July 2016
- Created independently for publication.
- Use RGB sliders to create a custom gradient wallpaper. The wallpaper background updates in real time.

### **Classroom Manager** — *Android, Java, SQL*

<http://bit.ly/2g8opTR>

- Dec 2015 - May 2016
- Created independently for Kentucky State Science Fair and professional use.
- Track classroom data: student attendance, assignments, grades, and behavior issues during class. Built for Android phone/tablet and uses SQL to store different classroom data.
- Won 2nd place at the KY State Science Fair.
- Used by teachers at duPont Manual High School.

### **VEX Robotics Manual and Automatic Control Design** — *C, VEX Robotics*

- Oct 2015 - Mar 2016
- Created in Special Topics: Robotics for competition (was programmer for the team).
- Robot competed in Kentucky Vex Robotics's yearly competition.
- 3rd place for the Automatic competition.

### **League of Legends Player Lookup** — *Android, Java, Riot Games API (JSON)* <http://bit.ly/2fUpXOe>

- May 2015 - Nov 2015
- Created independently for publication.
- Player stats for all time and past 10 games. Includes champions played, KDA, possible duos/teams, and more.
- Data from Riot API and Data Dragon.
- Uses Async tasks for background processing (so it isn't on main thread).

### **Bluetooth Rock Paper Scissors** — *Android, Java, Bluetooth*

Play Store: [goo.gl/hET3vH](https://goo.gl/hET3vH)

- July 2015 - Sept 2015
- Created independently for publication.
- Connect your phone to a friend's over bluetooth and play Rock Paper Scissors. 3,500 downloads and counting.

### **Sliding Puzzle** — *Android, Java*

- Feb 2015 - Apr 2015
- Created independently for publication (code was lost during Windows Update).
- Allowed users to select an image from their gallery or from Google Images to act as the background for the Sliding Puzzle Game.

### **Flying Moo** — *Android, Java*

- Feb 2015
- Created independently for learning.
- Uses the gyroscope to detect when the phone is in free fall (being thrown or dropped) and, when it is, the phone let's out a "MOOOOOooooo".

### **Mustache Me** — *Android, Java*

Play Store: [goo.gl/2f8jU1](https://goo.gl/2f8jU1)

- Dec 2014 - Mar 2015
- Created independently for publication.
- Grid-based puzzle game where you use mathematical skills and guessing to find a hidden potato.
- Use baby potato followers and angry non-moving potatoes to create a wall and capture the hidden potato.
- Over 100 levels with 5 different game modes.

### **Pug or Croissant** — *Android, Java*

- Jan 2015
- Created independently for learning Android basics.
- Shows an image of either a pug or a croissant and the user has one second to tap the "Pug" button or the "Croissant" button.
- Extended competition to other images such as Penguin or Snow Leopard, Dog or Fried Chicken, etc.
- Based off the game "Llama or Duck".

### **Quadratic Formula** — *Android, Java*

- Dec 2014
- Created independently for learning Android basics.
- Does the quadratic formula flawlessly.