Ryan Rothweiler

Senior Software Engineer   Salem, Oregon, USA

EMAIL
RyanRothweiler@gmail.com

GITHUB
github.com/RyanRothweiler

WEBSITE
ryanrothweiler.github.io

PHONE
503.798.7873

EDUCATION

Western Oregon University, Monmouth Oregon
B.S in Computer Science, June 2017

Chemeketa Community College, Salem Oregon
A.A in Visual Communications, June 2013

WORK EXPERIENCE

TRIPP INC

JAN 2018 - PRESENT   SOFTWARE ENGINEER   UNITY C#   LINK

- Responsible for core features including user account management, UX implementation, and user surveys.
- Wrote client side analytics system.
  - Allowed further company funding though reports generated.
  - Setup automated testing infrastructure to ensure reliability of analytics events.
- Implemented native Android service in Java to pre-download content at night.
- Managed and developed PlayStation4 version of project from start to release.
  - Communicated with Sony to fix bugs and move product through QA process.
  - Drove monthly releases to bring latest updates to PS4 customers.
- Helped maintain 75+ fps throughout the entire product on all platforms.
- Shipped product on multiple platforms including Lenovo Mirrage, Oculus GO, Oculus Quest 1/2, PS4, PS5.
- Worked in startup environment, adapting to changing deadlines and requirements, establishing healthy company norms, present and positive during crisis, self-driven and self-managing.
- Automated content creation pipeline to allow weekly delivery of new audio.
- Helped manage engineering team grow from 2 engineers to 8.
- Mentored new hires on production pipeline, debugging fundamentals, and team communication.
- Supported a live service, working with customers and customer service team discover and solve live bugs.
- Drove engineering decisions balancing long term sustainability and short term feature requirements.

Unity Freelancer

DEC 2014 - JAN 2018

- Completed 20 contracts with 30 clients including five shipped games on Android and IOS.
- Sustained work with two long term clients across four projects and two years.
- Experienced in local and online networking, custom editors and tools, mobile development, VR and AR.
- Consistent work in client communication, project management, cost / time estimates, and feasibility.
- Wrote features such as : local and online multiplayer, input recording and playback system, custom physics, player controls, input mapping, and custom level editing tools.

EMAIL
RyanRothweiler@gmail.com

GITHUB
github.com/RyanRothweiler

WEBSITE
ryanrothweiler.github.io

PHONE
503.798.7873

PERSONAL PROJECTS

Custom 2d Game Engine

JUL 2015 - PRESENT   C++   LINK

- Game engine written to become more familiar with lower level development.
- Engine utilizes no external libraries. All behavior implemented by me.
- Features GIF encoder, BMP decoder, WAV decoder, JSON read and write, strings, linked lists, immediate mode UI,
- OpenGL renderer, live code editing, and clean separation between platform and game code.
- Supports Windows and Android.
- OpenGL renderer features include Physically Based Rendering, Image Based Lighting, post processing effects, and hot reloading of shaders, textures, and models.
- Utilized Android NDK and a Java layer to run C++ engine code.
- Custon MetaProgramming preprocessor which generates type data for use at runtime.
- Generic multithreaded worker queue. Currently utilized for dynamic asset loading.

SandCat : Game Prototyping Language

JUL 2015 - JAN 2017   C/C++   LINK

- Domain specific language for games rules prototyping.
- Allows non-programmers to design, playtest, and get feedback without writing code.
- Working parser which is loaded by Unity to allow quick playtesting.
- Parser supports Windows, Linux and Android.

Hotwire Robotics

JAN 2016 - PRESENT   MENTORING   JAVA   LINK

- Lead programming mentor for local high school FIRST team - Hotwire Robotics.
- Teaching Java to middle school and high school students.
- Manage code base acrossing incoming and outgoing student developers.
- Mentor and help implement robot features. Including autonomous robot control, driver station feedback, semiautonomous robot control using sensors such as gyroscopes, limit switch, potentiometers, and vision tracking.
- Manage team of adult mentors and student programmers in high intensity and time constrained work environments.
- Inspire students to learn, and push them to grow while also keeping a fun and light hearted environment.

INTERESTS

Games as Art

- Producing games which balance art and product.
- Playing as many games as possible to find the best parts of each.
- Watching hours long youtube videos with deep analysis of single games.

Board Games

- Applying design lessons learned from board games to digital video games.
- Spending time with loved ones.

EMAIL
RyanRothweiler@gmail.com

GITHUB
github.com/RyanRothweiler

WEBSITE
ryanrothweiler.github.io

PHONE
503.798.7873