

Ryann McQuilton

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TECHNICAL EXPERIENCE

Plinko.js • Software Engineer June 2018 - Present

- Co-created a real-time, multiplayer physics game that may be played in browser using only JavaScript, requiring no special client-side plugins
- Built back-end server architecture with Node and front-end responsive lobby system with React
- Created a client-server network architecture that operates over the WebSocket protocol to synchronize application state across the internet to multiple clients in real time
- Designed a custom renderer to animate the game world at 60fps using HTML5 Canvas
- Simulated a lag-free, real-time user experience despite network latencies of 100-200ms
- Implemented client-side prediction algorithms to minimize data needs
- Optimized data transmission using quantization and binary serialization, which reduced bandwidth consumption by nearly 90%

Plinko.js White Paper: <http://plinkojs.com/about>

Freelance • Full-Stack Web Developer June 2016 - Present

- Develop web applications for personal and open-source projects
- Implement test suites with Minitest, Jasmine, and Jest
- Built a Rails back-end API with a SQL database and a React/Redux front end to create Reaction, a clone of the popular Trello project management app
- Created Postit, a Reddit-like sharing app built on Rails and backed by PostgreSQL

OTHER EXPERIENCE

University of Southern California • Program Coordinator February 2010 - May 2017

- Managed the websites of three USC honors programs
- Planned and implemented internal and external communications strategies, including nationwide campaigns
- Collaborated with executive-level leaders across the university

SKILLS & TECHNOLOGY

Languages	Ruby, JavaScript ES5/ES6+, Node, SQL, HTML5, CSS
Frameworks	React, Rails, Redux, jQuery, Express, Sinatra
Other Tech	WebSockets, RESTful APIs, Postgres, Matter.js, Git

EDUCATION

Launch School • Remote
Full-Stack Web Development 2016-2018

University of Southern California • Los Angeles, CA
Master of Professional Writing, GPA 4.0 2014
Bachelor of Arts, Communication, Magna Cum Laude 2009