QIUMIN YIN

SOFTWARE ENGINEER

CONTACT

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github.com/rainmire

rainmire.live 🌐

EDUCATION

University of California Los Angeles – **Los Angeles, CA**
Bachelor of Science in Bioengineering, Computer Science Technical Breadth
Sept 2012–Dec 2016

SKILLS

React
Redux
Ruby on Rails
Active Record
PostgreSQL
NodeJS
Express
Mongoose
MongoDB
Ruby
JavaScript
C++
Java
HTML
CSS
React Native
SQL
MATLAB
Bash
Git
AWS

PROJECTS

Message-Me: RESTful Instant Messaging Client | React/Redux/Rails

Github: github.com/Rainmire/message-me
Live: message-me.live

- Implemented websocket connections using Rails 5 Action cable, allowing users to instantly send and receive messages without refreshing
- Integrated Cloudinary for image uploading to allow users to send images and set custom profile pics
- Built a predictive user search function which updates suggestions on key press
- Securely authenticates users by hashing and salting passwords using BCrypt

Umbrella: Mobile Social Platform for Parents and Teachers | React Native/Redux/Rails

Github: github.com/Rainmire/umbrella
Live: zqyanglily.wixsite.com/umbrella

- Integrated Google OAuth2 along with JSON Web Token in a Rails login API, providing an extra layer of security to protect user information
- Dynamically loads posts to maximize performance and minimize storage needed
- Supports multiple levels of user privilege, allowing the user to access different functionality depending on their user type
- Incorporated a React Native calendar, on which all users can see events that privileged users post

emotion: Custom Emote Bot for Discord | NodeJS/MongoDB

Github: github.com/Rainmire/emotion

- Designed and built a bot using NodeJS to fulfill the need for sending custom emote images with a simple text command
- Incorporated command detection by reading user messages and responding to particular message patterns (i.e. messages that start with "!" or "?")
- Implemented the ability to add, delete, send, and list emotes, as well as import emotes from other servers using a UUID token
- Integrated a MongoDB database using mLab to store custom emotes
- Deployed server onto Amazon Elastic Compute Cloud for stable and reliable service

Canvas Cricket: Pixel Collision Physics Engine Demo | JavaScript

Github: github.com/Rainmire/cricket
Live: rainmire.github.io/cricket

- Incorporated HTML5 Canvas with frame-by-frame re-rendering, producing fluid animation
- Detected user input and used it to render mouse paths, allowing users to dynamically generate environment by drawing on the canvas
- Programmed a pixel-based physics engine to detect collision by generating and comparing bitmaps, making the terrain both dynamic and interactive

EXPERIENCE

System Administrator

UCLA Semel Institute for Neuroscience and Human Behavior | Los Angeles, CA | May 2016–Dec 2016

- Setup and maintenance of MacOS research computers and servers, including routine backup and troubleshooting
- Encrypted personal machines and installed security measures
- Provided technical support for research staff

Research Assistant

Staglin IMHRO Center for Cognitive Neuroscience | Los Angeles, CA | May 2015–May 2016

- Wrote and ran Bash shell scripts to process raw FMRI images, streamlining data analysis
- Worked with UCLA's Hoffman2, learned how to submit jobs to computing clusters
- Handled test subjects and prepared testing rooms, gained hands-on experience in human research