

Clayton Christian

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SKILLS JavaScript, React, Redux, Node.js, Ruby on Rails, PostgreSQL, C++, MATLAB

PROJECTS

CloudSounds | *Ruby on Rails, Javascript, React/Redux, PostgreSQL*

[Live](#) | [Github](#)

Fullstack clone of popular music sharing site SoundCloud

- Utilized Amazon AWS S3 to store audio and image files, allowing for a highly scalable solution to users uploading and listening to music anywhere.
- Integrated React Audio Player with Redux state to create continuous music playing when pages change.

No Plan Needed | *Mongo, Express, React, Node.js*

[Live](#) | [Github](#)

Random event generator based on geolocation allowing for user preferences

- Incorporated five different APIs (Google Places, Eventful, Hiking Project, izi Travel, PredictHQ) into event sampling algorithm based on users preferences.
- Created event normalizers to parse responses from multiple APIs into a standard state.

Sounds of Life | *Javascript, Tone.js*

[Live](#) | [Github](#)

Minimalist exploration of Conway's Game of Life with tone overlaying based on grid position

- Implemented volatile tick speed, allowing a slide bar to change how fast the game progresses.
- Engineered game board by tying outer edge logic together to create infinite playing area effect.

Capstone Project | C++, Mbed OS, MATLAB

Worked with John Deere to record and analyze braking performance metrics on front end loaders

- Communicated with on board CAN bus to write data to SD card real time, following SAE J1939 protocol.
- Integrated external sensors (temperature, humidity, load) to combine with CAN bus data through microcontroller.

EXPERIENCE

Electrical Engineering and Instrumentation Intern

Jacobs Engineering, Indianapolis, IN

May 2018 - July 2018

- Designed electrical schematics for large-scale construction projects.
- Evaluated various instrumentation for compatibility with drawings, researched possible replacements.
- Collaborated between multiple departments, cross-checking for conflicting drawing revisions.

Student Research Assistant

Indiana University School of Medicine

May 2017 - July 2017

- Applied organizational skills to optimize collection and entry of large data sets.

Engineering Intern

Indiana University School of Medicine

May 2016 - July 2016

- Assisted in troubleshooting and fixing network and hardware issues within office.
- Successfully completed 3-D design and printing of medical sample trays using acrylic laser cutting techniques.

Eagle Scout - Boy Scouts of America

EDUCATION

App Academy, San Francisco, CA

Aug 2018 - Nov 2018

Immersive Fullstack Software Engineering Program

Purdue University, West Lafayette, IN

Aug 2014 - May 2018

Bachelor of Science in Electrical Engineering

Study Abroad

Maymester in Barcelona and Madrid, Spain

May 2016 - July 2016

Coursework: Machine learning in python, image processing