

Arthur Song

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PROJECTS

MWriter - [Demo](#) | [App](#) | [GitHub](#)

- MWriter is an alternative to Medium's text editor: it allows Medium users to organize their entries into journals, it has a cleaner, more functional WYSIWYG editor, and also has prettier formatting for code snippets
- When users publish to Medium using MWriter, MWriter uses GitHub's API to automatically create and import GitHub gists from any code snippets in their entry, something which many code bloggers manually do to make their code blocks look more presentable

Console-Poker - [Demo](#) | [App](#) | [GitHub](#)

- Built a 8-bit themed online multiplayer Poker application to share with friends
- Used WebSockets to create real-time player interactions and a live chatting feature (WebSockets heavy application)
- Integrated Stripe API to accept USD transactions and allow players to play with real currency

IoT Car - [Demo](#)

- Built an IoT, robot project to explore Arduino microcontrollers while utilizing web experience
- Using an ESP 32, connected the robot to the internet, created a mobile app using Flutter to send controls to the robot, utilized MQTT protocol for lightweight, quick communication between Flutter app and ESP 32, resulting in controllable IoT car

EXPERIENCE

Software Engineering Fullstack Intern

Sep 2020 - Present

Louis and Gregory - [App](#) | [Demo](#)

- Researched third-party payment processors that would suit our microtransaction business model and also fit our hardware and software requirements
- Used Paypal Here SDK to build a fully customized (PCI-DSS compliant) checkout experience in React, tested many different checkout scenarios to ensure reliability, stored order information in AWS MySQL database for later analysis
- Used Braintree Hosted Fields to give users the options to checkout by inputting credit card information
- Designed a QR code feature in React, NodeJS, and with Socket.io that allows users to "sync" and control our POS machines, real-time, directly from their phones, allowing users a contactless way of purchasing products from our machines
- Configured WebSockets in NodeJS server so that React app can communicate real-time with the Arduino microcontroller during the checkout process
- Worked on mobile and tablet views of React application to create a cleaner app
- Started and maintained documentation for Louis and Gregory's repositories, resulting in easier onboarding of engineers

SKILLS

- Web: Ruby on Rails, React.js, REST, Socket.io, MQTT, Third-Party APIs
- Languages: NodeJS, Ruby, HTML5, CSS3, JavaScript
- DevOps: AWS, Docker, Heroku, GitLab CI/CD
- Databases: MySQL, PostgreSQL, MongoDB
- Other: Git, GitHub, Bash Scripts, Jest, Arduinos, IoT

CERTIFICATIONS

AWS Cloud Practitioner Certification

Coursera Improving Communication Skills

EDUCATION

Flatiron School

2019 - 2020

Full Stack Web Development, Ruby on Rails and React program

Glendale Community College, Glendale, CA

2015 - 2017

Coursework completed towards B.S. in Computer Science (47 units)