

Zhi Shen Yong

314-680-6805

zyong@wustl.edu

7019 Pershing Ave,
St. Louis, MO
63130

Courses:

Full-Stack Web Development,
Data Structures & Algorithms,
Linear Algebra,
Internet of Things,
Object-Oriented Programming,
Probability & Statistics,
Machine Learning,
Formal Languages & Automata,
Software Engineering
Workshop

Websites:

<https://github.com/zhish3n>
<https://zhish3n.github.io/>

Languages:

Proficient: Java, C++,
JavaScript, HTML/CSS

Familiar: Python, PHP, SQL,
MATLAB, C, Objective-C,
TypeScript

Libraries/Frameworks:

jQuery, Angular, React,
Bootstrap, React Native,
Socket.IO, Node.js, Apache
Cordova, Ionic

Software:

Eclipse, Jupyter, Visual Studio,
Atom, Android Studio,
Microsoft Suite, Adobe Suite,
AWS, Heroku

Awards:

Dean's List: 2016 – 2018
Robert N. Varney Prize

Education:

Washington University in St. Louis (Class of 2020)

Major: Computer Science / Minor: Anthropology / GPA: 3.97

Work Experience:

Software Developer Intern, Xchanging

Kuala Lumpur, Malaysia: June 2018 – August 2018

- Drafted and presented paper prototypes according to compiled research data and client requirements.
- Transformed preliminary mobile app prototypes to a single hybrid mobile app in React Native to minimize costs in the development cycle.
- Developed speech-to-text and text-to-speech native modules for the mobile app using IBM Watson, Java, and Objective-C.
- Performed multiple rounds of A/B testing to modify features, decrease costs, and improve scalability.
- Integrated the finished standalone application into the company's educational platform; academic courses using the platform aimed at improving spoken English can utilize the application to train and test students' pronunciation.

Projects:

Remote Environment Monitoring System (<https://zhish3n.github.io/rem>)

- Built and programmed solar-powered microprocessors to periodically collect environmental data and remotely broadcast the data over LoRaWAN.
- Built and programmed a server microprocessor to automatically process incoming broadcasts using Publish/Subscribe techniques and to display the collected environmental data on a web app built in HTML, CSS, and JavaScript.
- Allows users to conveniently monitor the long-term temperature, humidity, and ambient light of multiple locations in a 10-mile radius while also allowing users to save maintenance costs as data-collector devices are fully self-sufficient.

Garage System & Remote Control

- Built and programmed a microprocessor to control the essential functions of a garage system.
- Developed a web app using HTML, CSS, and JavaScript and a mobile app using Ionic, both of which use Publish/Subscribe techniques to synchronize with the microprocessor to allow users remote control over the garage system.

Calendar Web Application

- Developed a responsive, non-redirecting asynchronous calendar web app using AJAX that allows users on different accounts to create, save, and share events.
- Added security implementations which include CSRF tokens, XSS attack prevention, and SQL injection prevention to protect user data.

Chat-Room Web Application

- Built a real-time, bi-directional communication platform using HTML, CSS, Node.js, and Socket.IO that allows users to create and join public chat-rooms as well as password-secure private chat-rooms.
-