CHANGNING XIE Full Stack web/software developer

[**GitHub**](https://github.com/xiechangning20)**|** [**LinkedIn**](https://www.linkedin.com/in/changning-xie-235570171/) **|** [**Portfolio**](https://xiechangning20.github.io/)| xiechangning20@gmail.com

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**Skills**

**Front-End:** HTML5, CSS3, JavaScript ES6, JQuery, Ajax, JSON

**Back-End:** Java, Node.js, MySQL, MongoDB, SQLServer, Redis, Maven

**Frameworks and Platforms:** React/Redux, Express, Bootstrap, Spring Boot

**DevOps and CI/CD:** Jenkins, Docker, AWS (EC2, SES), Git/GitHub/GitLab

**Philosophies:** RESTful, MVC, OOP, SaaS, Agile/Scrum, Data Structure/Algorithm, Responsive Design

**Work Experience**

**Software/Web Application Developer** August 2020 – November 2020 JDZT Co., Ltd - Chengdu, Sichuan, China

* Worked with an Agile team to develop a cloud-based big data platform for a Civil Engineering company
* Developed and maintained RESTful APIs to achieve integration and visualization for engineering data
* Integrated engineering data from third-party APIs
* Conducted web service deployment on Linux servers and documented the processes
* Conducted research into new technologies, including tools, components, and frameworks
* Toolkit: Java 8, Spring boot, Vue.js, MySQL, Redis, Tomcat, Swagger, GitLab, IntelliJ Idea, VS Code

**Personal Projects**

**Clay Music Shop** [Demo](http://54.183.150.44:8080/Myshop/web/index.jsp)/[Code](https://github.com/xiechangning20/Java-MVC-E-Commerce)

* Built an e-commerce web application using Java, JSP, Bootstrap and Eclipse
* Developed APIs for user authentication, goods display, adding shopping carts and order placing
* Designed a MySQL data base to store data for users, products and orders
* Integrated AWS Simple Email Service for user email activation before registration
* Deployed the project on AWS EC2 through a CI/CD pipeline built on Jenkins, Maven, Tomcat and Docker

**MusicGram** [Demo](https://secure-sands-11610.herokuapp.com/)/[Code](https://github.com/xiechangning20/MusicGramP)

* Built a social network web application using React/Redux, Node.js/Express, MongoDB and VS Code
* Developed React components and RESTful APIs for user authentication, profile display, audio file upload & streaming, and YouTube video streaming

**Android Earthquake Listener** [Code](https://github.com/xiechangning20/Android-EarthQuake-Listener)

* Built an Android web application that provides update of seismic data from United States Geological Survey (U.S.G.S) using Java and Android Studio
* Integrated Google Maps API to display the extracted data

**Analysis of Ottawa’s RLC system** [Report](https://drive.google.com/file/d/1BUuuSZZ0HzvUcf7vU3lQJ3v1LHMkQpKy/view?usp=sharing)

* Evaluated the effectiveness of Ottawa’s red-light-camera system in improving road safety
* Organized large sets of traffic collision data and analyzed them using statistical method

**Education**

**Master of Civil Engineering:** Transportation Engineering September 2018 – May 2020

University of Ottawa – Ottawa, ON

**Relevant courses**:

Advanced Data Technology in Road Safety Analysis, Transportation Network Data Analysis