

# Chao Wan

## Full Stack Developer

### SUMMARY:

- 3+ years **Full-Stack Developer** in IT, E-Commerce and Fintech Industry
- 3+ years in web development using **HTML, CSS, JavaScript** and **TypeScript**
- 3+ years in **Java** with Spring boot and **C#** with .NET
- 3+ years **Python** Full-Stack Development with Libraries and Frameworks
- 2+ years Relational Database and NoSQL Database such as **Oracle, MySQL** and **MongoDB**
- 2+ years in MEAN stack technologies: **MongoDB / Express.js / Angular.js / Angular 2 & 4 / Node.js**
- Exceptional expertise in Front-End libraries and frameworks such as **Angular 2/4/5, React.JS, Bootstrap, PrimeNG, KendoUI, Flutter, PWA** and **WebGL**
- Solid understanding of **Object-Oriented Design Patterns**.
- Expert on using **Maven, Hibernate** and Java **Spring MVC** to manage Java Projects
- Worked in **Agile/Scrum/SPRINT** development Methodologies
- Experience with **DevOps** tools for Production Control
- Well trained in **R** and **MATLAB** for Data Science
- Side Projects with **Progressive Web App** and **React.js**

### Education:

DePauw University: Bachelor of Science – Computer Science

2013-2017

### TECHNICAL SKILLS:

**JavaScript:** ES 6, TypeScript, Functional Programming

**Java:** Java 1.5-1.8, OOP, Java Collections Framework

**Java EE:** JSP, Servlet, Hibernate, JDBC, Spring boot.

**C#:** Entity Framework, .NET, ASP.NET

**Python:** Python 2/3, Pygame

**Web Technologies:** HTML/HTML5, CSS/CSS3, Bootstrap, Angular 2/4/5, React.js, JSON, XML, JavaScript, TypeScript

**Back-End Frameworks:** Node.js, .NET, Springboot

**Other Languages:** SQL, C#, Scala, C

**Database:** SQL, Oracle SQL, MySQL, MS SQL, PostgreSQL, MongoDB

**Data Science:** Python, numpy, R, MATLAB, Apache Spark, Scala

**Version Control:** SVN, Git

**Testing Unit:** Jasmine, Mocha, JUnit, Karma

**Dependency Management:** Maven, Gulp, NPM, Webpack

## **PROFESSIONAL EXPERIENCE:**

### **Duke Energy Corporation**

**Charlotte, NC**

**Jan 2019 – Present**

#### **Full Stack Developer II / UI Lead / UI Architect**

I was hired as a Full Stack Developer and the Key Role of Front-end for the project. As the one fully in charge of the Front End in the team, my responsibilities are not only writing clean and functional code but also deciding the technology stack and framework, as well as creating front-end architecture for the project.

#### **Responsibilities:**

- Created the Architecture for the Front-end
- Built up infrastructure with **Microsoft Azure, APIGEE** and **Swagger**
- Wrote shared utilities, components, services and key modules for the Front-end Part
- Displayed complex data models including **Tree, Grid, Table** and made them **Editable**
- Used **ES6, Functional Programming** and **Typescript** features if possible
- Chose **UIKit** and **Kendo UI** for UX libraries
- Designed all the pages with **CSS** class in this application to make them all responsive
- Used **C#** and **.NET** core technology as Back-end service
- Created Restful API with **.NET Link** to communicate with **SQL** Database
- Used **Jira** for source control
- **Agile** work environment

#### **Environment:**

HTML/HTML5, CSS/CSS3, Bootstrap, JavaScript, TypeScript, Angular5, .NET core, Oracle 11g, Jira, AJAX, JSON, C#, Jasmine, Karma, UIKit, Kendo UI

### **BMO Harris Bank**

**Dec 2017 – Jan 2019**

**Livonia, MI**

#### **Full Stack Angular Developer**

I was hired as a Full Stack Developer in Transportation Finance team. The whole web-application was originally built with JavaScript and Google Web Toolkit. My job is to rebuild the web-application with **Angular5** in TypeScript and help architect the whole framework so that it could be scalable.

#### **Responsibilities:**

- Redesigned the **UX** with **PrimeNG** and **Bootstrap**. Created Responsive Web Design using **Bootstrap Grid System** and **PrimeNG**, implemented Navigation bar, Toggleable tabs, Dropdown menu, Image Carousel, Scrollspy, Button, Modal, Form, Table, Pagination, etc.
- Designed and Built the web application view with **HTML5** and **CSS3**
- Used **TypeScript** instead of JavaScript to handle logic, manage code and let code be more extensible and portable.

- Fully applied **Angular 5** functionalities: **Two-Way data binding, Event Tracking, Reactive Form Builder, Routing Control, Dependency Injection, Components Based and Directive Driven**
- Developed Back-End Service Call functions to handle **Restful** HTTP requests and responses, creating **Middleware** between different data sources and streaming data
- Created several **Customized Directives** in **Angular 5**, making reusable components that fulfilled all detailed requests
- Created restful service backend based on **Spring Boot** and implement the back-end business logic with **Java 8**
- Designed the project based on **Java Spring** and connected to **Oracle** database with **Hibernate** framework in developing environment
- Mapping data-structure for both back-end and front-end to the database using **JDBC** and **Hibernate**
- Followed **Agile** to commute and make sure everything is under control, strictly with daily scrum, three-week sprint and PI planning
- Used **Jasmine** test framework to unit test the Angular TypeScript code and Unit tested the Java code with **JUnit** test framework.
- Participated in the implementation of standalone **Micro Front-End, Portal-Micro-UI** interaction, UI communication based on Angular 5 and kept the feature of Single-Page Application
- Used **SVN** for version control and **Jenkins** to automate the build and deploy process
- Analyzed data calculation results report by comparing retrieved data from orders' information and users' trending

#### Environment:

HTML/HTML5, CSS/CSS3, Bootstrap, JavaScript, TypeScript, Angular5, Spring-boot, Oracle 11g, SVN, Jira, JUnit 4, AJAX, JSON, Java 1.8, Jasmine, Karma

#### UNDCRWN

Jan 2017 – Dec 2017

#### New York City

#### Full Stack Java/Angular Developer

UNDCRWN is a company that creates & sells smart design inspired by sports culture. The whole web-application was originally built with JavaScript and jQuery library. Our software department's job is to rebuild the web-site with **MEAN stack** technologies which provide a better performance and a more coding-friendly development environment.

#### Responsibilities:

- Participated in every phase of **Software Development Life Cycle**: Requirement Analysis, Design, Implementation, Testing and Maintenance with **Agile**
- Built Web Pages with **HTML/HTML5, CSS/CSS3, Bootstrap, AJAX**
- Worked closely with **UI** design team
- Implemented Front-End with **Angular.js** to apply reactive functions such as **Form Building, Form Validating, Filter, Data-Binding, Custom Directives, Routing**
- Implemented well-structured components with **AngularJS** modules, such as **Controllers, Services, Filters and Directives**

- Implemented restful **WebServices** by **Node.js**
- Created a **NoSQL** database to store users' information and products' introduction, with **MongoDB** and **Mongoose** Framework, visualized by **Robot 3T**
- Used **Express** as back-end framework, controlling the Back-End elegantly with **Middleware Interface, Session Management** and **Static File Serving**
- Used **GIT** to do version and source control

**Environment:**

HTML/HTML5, CSS/CSS3, Bootstrap, JavaScript, Java 1.6, AngularJS, jQuery, Express, Jira, Git, JSON, Node.js, Mongoose, MongoDB

**NextCapital**

**May 2016 – Dec 2016**

**Chicago**

**Part-time Software Developer/ UI Designer**

NextCapital is a digital advice platform providing financial advice to investor at an affordable price. I did a semester internship in this company and then continued as a part-time developer.

**Roles and Responsibilities:**

- Optimized algorithms of several data science models
- Utilized **Linear Regression, Regression Tree, Fit Ensemble** in **R** language to optimized existing algorithms

**Environment:**

**R, JavaScript, HTML, CSS, jQuery, MATLAB**