

# Zeng Fu

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## EDUCATION

### UNIVERSITY OF WASHINGTON

#### MS IN COMPUTER SCIENCE

Jan 2021 | Seattle, WA

Cum. GPA: 3.8 / 4.0

Major GPA: 3.8 / 4.0

### UNIVERSITY OF CALIFORNIA SAN DIEGO

#### BS IN MATHEMATICS -

#### COMPUTER SCIENCE

June 2019 | San Diego, CA

Cum. GPA: 3.4 / 4.0

Major GPA: 3.7 / 4.0

## LINKS

GitHub:// [xZengFu](#)

LinkedIn:// [Zeng Fu](#)

Facebook:// [Zeng Fu](#)

## COURSEWORK

### GRADUATE

Advanced Algorithms

Services Computing

Applied Distributed Computing

Internet Of Things

Computer Networks

### UNDERGRADUATE

Advanced Data Structures

Basic Data Structures and

Object-Oriented Design

Design and Analysis of Algorithms

Theory of Computability

Operating Systems

Computer Organization and

Systems Programming

Software Tools and Techniques

## SKILLS

### TECHNICAL SKILLS

Java • C • C++ • C# • Python

HTML • CSS • JavaScript • React

RESTful • SOAP • Web Services

Distributed System • AWS • SQL

ASP.NET • IntelliJ • JSON • XML

### SOFT SKILLS

Bilingual Communication (*English, Chinese*)

Team Working • Leadership

Decision Making • Public Speaking

## TECHNICAL PROJECTS

### WEB SERVICES FOR PARKING STRUCTURES

Sept. 2019 - Dec. 2019

- Wrote the **Software Requirements Specification** (SRS) to design architectures.
- Used **ASP.NET (C#)** to create **Web Forms** with **HTML** and **CSS** for **Client Side**.
- Applied **Model-View-Controller (MVC)** framework to build **SOAP Web Services** to process inputs from users and **CRUD RESTful Services** using **ASP.NET (C#)** to manage users' and parking information in **Azure Database**.
- Built a **Java Server** which contains **RESTful services** that shares data in different types, like **JSON**, **XML**, **HTTP Response** to use external third-party **Web APIs**.
- Made **Java** and **C# compatible** and set appropriate methods to **detect errors**.
- The whole system can help users to **check cars' status** (parking time, parking fee), **pay online**, **manage their accounts**, and **use third-party services** online.

### OFFICIAL WEBSITE OF CHINESE COMPUTER COMMUNITY

Apr. 2019 - Aug. 2019

- Modified and deleted most previous outdated or repeated **HTML**, **CSS** and **JavaScript** codes (more than **5000** lines) to show this organization's information. These modifications made the website run **2 times faster** and **more fluent** and **fancier** than before for opening a new page, viewed photos.
- Improved the **visuality and readability** of the website when using **mobile client** and fixed bugs when the website is opened on different types of cell phones.
- Built the **feedback** page and new **administrators' entrance** using **HTML**, **CSS**, **JavaScript** (more than **2500** lines) and **MySQL** server to store users' submitted information in Database and verify authorization for administrators.
- **Encrypted** the data in the database in case of personal information **disclosure**.
- Used **GitHub** to check **team works** and track code changes for **version control**.
- Designed web templates which will **save at least 10% time** if we want to add similar parts to this website in the future.

### LEXICON Jan.2017 - March.2017

- Established an adapted data structure, **Huffman Code Tree**, achieved by the Huffman Algorithm to store plenty and repeat information.
- This **Java** application (more than **700** lines) can **compress (encode and decode)** all types of **binary files**, and the **compress rate**, ranging from 66% to even more than 100%, depends on the original **distribution of the characters**.

### 6 DEGREES (OF SEPARATION) Jan.2017 - March.2017

- Used the data structure **graph**, **unordered map**, inner class to establish connected graphs containing given actors and their movies
- Applied **Shortest Path Faster Algorithm** which is optimized from **Bellman-Ford algorithm** to **find the shortest path** from a source or two requested nodes.
- Can be applied to large database to quickly **find the relationship** that users want to find.

## WORKING EXPERIENCE

### UNIVERSITY OF WASHINGTON

#### COURSE FACILITATOR (TEACHING ASSISTANT FOR DATA STRUCTURES)

Jan 2020 - Current

Help undergraduate students to solve their problems and understand the lecture contents. Integrate review material with new material and promote sense of community and encourage communication.