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

Personal Website: **ZengFu.info**
GitHub:// **xZengFux**
LinkedIn:// **Zeng Fu**
Facebook:// **Zeng Fu**

COURSEWORK

GRADUATE
- Advanced Algorithms
- Services Computing
- Applied Distributed Computing
- Internet Of Things
- Computer Networks
- Big Data
- Database System

UNDERGRADUATE
- Advanced Data Structures
- Basic Data Structures and Object-Oriented Design
- Design and Analysis of Algorithm
- 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.