WANG-HSING CHEN

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EDUCATION

University of Southern California   Los Angeles, CA
Bachelor or Science in Computer Science | GPA 4.0/4.0   May 2025
Honors: The Engineering Honor Society of TAU BETA PI, The Honor Society PHI KAPPA PHI, The Viterbi Dean's List (x3)
Relevant Courses: Data Structures and Object Oriented Design, Introduction to Algorithms and Theory of Computing, Principles of Software Development, Software Engineering, Introduction to Computer Systems, Full-Stack Web Development

TECHNICAL SKILLS

Programming Languages: C/C++, JavaScript, Java, Python, Assembly
Web Development: React, HTML, CSS, jQuery, Firebase
Others: Git/GitHub, Android Studio, JUnit, Visual Studio Code, Eclipse, PyCharm, Unix/Linux Shell

EXPERIENCE

USC Viterbi   Los Angeles, CA
Course Producer   January 2024-Present
- Mentor over 100 Introduction to Computer Systems students
- Conduct weekly office hours to provide in-depth guidance on topics in bitwise operations, assembly languages, as well as more comprehensive studies about caches, including organization flow, addressing, pipelining and heap management

USC Viterbi   Los Angeles, CA
Course Producer   August 2023-December 2023
- Mentored over 275 Introduction to Algorithms and Theory of Computing students
- Graded exams and deliver constructive commentary to students for continuous improvement
- Conducted weekly office hours to provide in-depth guidance on topics in amortized analysis, divide and conquer, greedy algorithms, graph algorithms, dynamic programming, network flow, linear programming and NP-complete principles

USC Viterbi   Los Angeles, CA
Teaching Assistant   May 2023-June 2023
- Instructed a class of 9 CS@SC Summer Coding Camp students in VEXcode VR programming and assembling robots
- Coached students to tackle pathfinding challenges using brute force techniques, as well as fostering a fundamental grasp of essential graph algorithms such as Breadth-First Search and Depth-First Search

ACADEMIC PROJECTS

FIND MY CLASSMATES – Java/ Android Studio (Team)
- Secured the Best Team Award among 60 competing teams and showcased product in front of panel
- Developed an Android application facilitating USC Viterbi students in connecting and engaging with peers by enabling class specific classmate discovery and communication features via Java and firebase database
- Implemented dynamic class display functionality featuring adaptable department and class tabs based on database records
- Engineered a comprehensive full-stack system for registration, rating, and classmate interaction. Users can enroll, leave comments, and engage with peers through user interface supported by dynamic updates from back-end system

Sal Ticket – JavaScript/ Java/ MySQL (Individual)
- Developed a full-stack web application allowing users to register, search, purchase and sell tickets
- Implemented different user interfaces and mechanisms for registered and unregistered users, allowing enrolled users with more comprehensive functionalities such as advanced event searching and trading system
- Manipulated back-end system via JavaServlets and MySQL as well as Restful API usage for acquiring ticket information

PERSONAL WEBSITE – JavaScript/ React (Individual)
- Built a robust front-end system using the JavaScript React library along with HTML and CSS
- Engineered various functionalities based on state changes using React hooks, components and routers
- Ensured an optimal user experience by implementing responsive design, adapting seamlessly across various devices

TICKET PROCESSING SYSTEM – Java (Individual)
- Developed a multi-threading system in Java that enables ticket transactions concurrently using Locks and Semaphores
- Utilized the Gson library for parsing user inputs, transaction schedules, and gent specifications