

ZIJIAN ZHONG

Dallas, TX | 646-886-0238 | zhongzj98@gmail.com | <https://linkedin.com/in/zijianz> | zijianzhong.com

EDUCATION

University of Southern California

Master of Science in Computer Science

Los Angeles, CA

August 2022 - May 2024

3.6/4.0 GPA

Advanced Coursework: Analysis of Algorithms, Database System, Multimedia System Design, Web Technologies, Computer Graphics, Advanced Mobile Devices & Games, Information Retrieval & Web Search Engines

University at Buffalo

Bachelor of Science in Computer Science

Minor in Mathematics

Buffalo, NY

August 2018 - May 2022

3.7/4.0 GPA with high distinction

Advanced Coursework: Software Engineering, Computer Security, Web Apps Development, Networking, Machine Learning

SKILLS

Programming Languages: Python, Java, C, C++, C#, Scala, JavaScript, TypeScript, OCaml, SQL, HTML, CSS

Frameworks & Libraries: React, Angular, Spring Boot, Unity, REST API, Bootstrap, Tailwind, Flutter, NodeJS, OpenGL

Tools & Cloud Platforms: AWS, GCP, Docker, MongoDB, MySQL, Git, Zenhub

EXPERIENCE

University at Buffalo

Research Assistant

Buffalo, NY

January 2021 - September 2021

- Collaborated with interdisciplinary teams to refine app design, and enhanced user engagement by simplifying navigation and feature accessibility across application in Flutter
- Processed and analyzed complex datasets using Python for stress measure and prediction purposes
- Co-author of research paper "Stress prediction using micro-EMA and machine learning during COVID-19 social isolation."

PROFESSIONAL CERTIFICATIONS

- AWS Certified Solutions Architect - Associate, AWS
- AWS Certified Developer - Associate, AWS

PROJECTS

eBay Shopping App

Angular, Java, JavaScript, Mobile App, Web App, MongoDB, Google Cloud, Bootstrap, NodeJS, UI/UX

- Enhanced search and filter experience by leveraging eBay's search engine Restful API
- Engineered a dynamic user interface with Angular and Bootstrap, automatically adapting content to various screen sizes
- Crafted a backend system with NodeJS and MongoDB to manage user data, improving app's personalization features
- Implemented cross-platform capability with Java to provide seamless shopping experience for users who use mobile app
- Deployed and managed app's backend on the GCP App Engine, ensuring seamless scalability and maintenance

Text Chat Application

C++, Socket Programming, TCP, Networking

- Developed the client and server components of a text chat application, consisting of one chat server and multiple chat clients over TCP connections
- Clients can either send a unicast message to any one of the other clients or a broadcast a message to all the other clients
- Enabled the server to buffer messages destined to clients that are offline with the ability to block any client based on IP address

Ray Tracing

C++, OpenGL, Computer Graphics

- Built a ray tracer to handle opaque surfaces with lighting and shadows
- Improved the image quality by using soft shadows and antialiasing with the supersampling method

PUBLICATIONS

- Li, H., Zheng, E., Zhong, Z., Xu, C., Roma, N., Lamkin, S., Von Visger, T. T., Chang, Y.-P., & Xu, W. (2022). Stress prediction using micro-EMA and machine learning during COVID-19 social isolation. Smart Health, 23, 100242.