Shangjie (Henry) Zheng

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EDUCATION

Southern Methodist University (SMU) ·· Anticipated May 2024
Master of Science in Computer Science   GPA: 3.96/4.00

University of Missouri-Kansas City (UMKC) ··· May 2021
Bachelor of Science in Mechanical Engineering   GPA: 3.52/4.00

PROFESSIONAL SKILLS

- **Programming Languages**: Java, Python, JavaScript, TypeScript, HTML/CSS, SQL, MATLAB
- **Database Management Systems**: MongoDB, MySQL
- **Development Frameworks**: Django, React, Redux, Node.JS, Express
- **Modern Development Methodologies**: Object-Oriented Design and Analysis, REST
- **Modern Development Techniques**: Machine Learning, Natural Language Processing, Artificial Intelligence
- **Development Tools and Platforms**: Amazon Web Services, Postman, Docker, Git/GitHub

ACADEMIC EXPERIENCE

TA Management System, SMU | *TypeScript, React, Node.js, MySQL, Jest, GitHub*····································· Fall 2023
- Developed a dynamic full stack application using React (front-end) and Node.js (back-end), integrated MySQL database, ensuring user-friendly experience and effective data handling.
- Drove development in a Scrum team, overseeing all stages from requirements analysis to application deployment.
- Utilized software tools for version control (GitHub) and container environments (Docker) during team development.
- Engineered for Lyle CS department, aiming to efficiently serve 1,000+ students and professors.

Teaching Assistant, "Fundamentals of Algorithm", SMU | *Teaching, Algorithm*··················Feb 2023 – May 2023
- Actively supported the professor and students in the course, addressing student inquiries, offering tutoring, enhancing their academic understanding and progress.
- Responsible for evaluating and grading assignments, providing constructive feedback to students to support their course development, and understanding of the materials.

Roadside Assistance Application, SMU | *JavaScript, Node.js, Express.js, MySQL, HTML, CSS* ············· Spring 2023
- Developed a web-based roadside assistance application for direct communication between drivers and technicians.
- Designed and implemented intuitive user interface using JavaScript, HTML and CSS, coupled with robust middleware built in Express.js for effective user-database interaction.
- Engineered back-end functionalities and integrated DBMS (MySQL) on top of Node.js framework ensuring a reliable and efficient software system.

Quadcopter Control System, UMKC | *Python, PID Control System* ·· Fall 2020
- Designed and assessed a multi-input, multi-output feedback control system, ensuring its dynamic responsiveness.
- Integrated measurement data from physical hardware into software-based embedded control algorithm, developing a Proportional-Integral-Derivative (PID) control system.
- Programmed the quadcopter for precise roll/pitch actions with rate and angle control for enhanced maneuverability.

PROFESSIONAL EXPERIENCE

Fuyao Glass Illinois Inc. ··· Jun 2021 – Jun 2022
Mechanical Engineer
- Demonstrated comprehensive skills while working across Fabrication, Quality Control, and Engineering departments.
- Improved process reliability through production monitoring, downtime analysis, and implementing QC strategies.
- Coordinated cross-department projects, reporting progress to the company, and facilitating management decisions.

Fuyao Glass Illinois Inc. ··· Summer, 2018/2019/2020
Engineering Intern
- Gained expertise and understanding in manufacturing process and the operation strategies adopted by the company.
- Supported project progress with research and 2/3D AutoCAD designs, enhancing cross-department collaboration.
- Bridged the communication between Chinese and US engineering teams. Preparing data for management reviews.

HONORS AND AWARDS

- School of Computing and Engineering Dean's List, UMKC ··············Spring/Fall 2017, Spring/Fall 2018, Spring 2021
- Dean's International Scholars Awards, UMKC ··Jan 2017
- Honor's College, UMKC ···Jan 2018