YIJU LI

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Last Revised: 2023/02/07. To access my latest resume, please click this link. For further insights into my profile, kindly visit YijuLi.info.

As a computer engineering and applied mathematics student at the University of California, San Diego, I have gained expertise in software development through internships at companies such as Cloudgame, Ubtech, and Qingmu Life Tech. I have honed my skills in front-end development using React and CSS, app development for the Wechat system using WXHL and JavaScript, and Android app development using Java and the Android SDK. My hands-on experience has given me a deep understanding of the development process, from design to deployment, and the importance of collaboration and communication in software development. I am a dedicated and hardworking individual who consistently strives to improve and expand my skillset and am eager to bring my skills and knowledge to a new role.

PROFESSIONAL EXPERIENCE

- **Software Engineer Intern** at Shengmu Life, 2022 Summer, 10 weeks
  - Developed Wechat apps with WXHL and JavaScript, including feature creation and app stability/performance assurance.
  - Collaborated on dynamic, user-friendly Android apps using Java and Android SDK, meeting business requirements.
- **Software Engineer Intern** at UBTech, 2021 Summer, 8 weeks
  - Developed a web-application, utilizing JavaScript and React to enhance the product's functionality and user experience.
  - Modified components in the programming interface to make it more approachable and accessible, particularly for young-aged children.
  - Improved the logistics of the programming process to simplify the user experience, making it easier for individuals of all ages to understand and operate the system.
- **Quality Assurance (QA) Engineer Intern** at CloudGame, 2020 Summer, 10 weeks
  - Designed and executed test plans, identified and reported software bugs, and worked closely with the development team to ensure a seamless user experience for the end-users.
  - Performed pressure tests to evaluate the stability and reliability of the gaming products under heavy usage conditions.

SOFTWARE ENGINEERING PROJECT

For a comprehensive understanding of my professional endeavors, I invite you to visit my website at YijuLi.info/Projects, where more projects are available for review.

- Cine-Eval: A Comprehensive **Full-Stack Web Application** for Movie Review and Evaluation
  - Utilized ReactJS for the front-end and ExpressJS for the back-end. The front-end was connected to the back-end through HTTP requests, specifically using POST requests to submit data and retrieve information from the database.
  - The database utilized is MySQL, which connects to the ExpressJS back-end through the use of RESTful APIs. The APIs were designed to handle the basic CRUD operations in order to allow for seamless interaction with the database.
  - The deployment of the project on Amazon Web Services (AWS) was executed by utilizing EC2 instances, and involved the creation of virtual servers and the configuration of network and security parameters to accommodate the application and its dependencies.
- **Kernel-Level** Thread Management Library for Linux
  - Designed and implemented a custom thread library for the Linux kernel in C, incorporating robust thread management capabilities, priority-based scheduling algorithm, semaphores for synchronization, inter-thread communication mechanisms such as pipes, message queues and shared memory.
  - Leveraged rate monotonic scheduling, thread pooling, and dynamic load balancing to ensured real-time responsiveness, optimized thread management and resource utilization and maximized performance by distributing workloads among threads
- Inspired by Microsoft Suphx: **AI** Solution for Incomplete Information Competition
  - Developed a Python-based data collection helper to gather real-world game data for AI training, and implemented a decision-flow algorithm to guide the AI's behavior in different scenarios.
  - Trained multiple decision-related **NN** models using both full and incomplete information for a unique training approach.

EDUCATION

Bachelor of Science in Computer Engineering
Bachelor of Science in Applied Mathematics
University of California, San Diego
Sep 2020 - current

TECHNICAL SKILLS

- Software Related
  - Programming languages: **Java**, **Python**, C++(**GLSL**), **C**, **JavaScript**, **HTML**(WXML), **CSS**
  - Topics Focused: Advanced Data Structures and Advanced Algorithms, **Reinforcement Algorithms**, **Neural Network**, **CV**, **Kernel Programming**, **Computer Graphics** Proficient Technologies: **Database**[MySQL, MongoDB], **Web Framework**[ReactJs, Spring, Django, ExpressJs], Cloud Computing[Amazon Web Services (**AWS**), Alibaba Cloud], Tools[Linux, **Git**, **DevOps**]
- Hardware Related
  - Topics Focused: **Digital Electronics and Circuit**, **Microcontroller/Microelectronic System Design**
  - **HDL**: SystemVerilog, VHDL
  - **EDA tools**: Modelsim(Questa), Quartus