HONGZHI ZHU

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EDUCATION

Arizona State University *Jan 2019 - Dec 2020 Phoenix, AZ*
MS in Computer Engineering *GPA: 3.56 / 4.0*

TECHNICAL SKILLS

Programming: Python, Java, JavaScript, Matlab
Software & Tools: **Tech Stacks:** Spring Boot, RESTful API, React, Angular, SQL, TensorFlow, OpenCV
Cloud Servers: Amazon Web Services AWS, Google Cloud Platform

WORK EXPERIENCE

Silicon Valley Bank *Mar 2022 – Jan 2023 Tempe, AZ*
Back-end developer
- Configured GitLab and Jenkins for CI/CD pipeline and added code testing using JUnit, resulting in efficient and automated testing, building, and deployment
- Developed and maintained RESTful APIs by writing OpenAPI contracts using Stoplight
- Implemented multiple back-end application layers, including Controllers, Services, and DAOs, using Java and Spring Boot framework
- Implemented a Wire transfer automation system, allowing for secure and fast transfers of funds between accounts
- Implemented an API-mock server using Node.js and JavaScript, allowing for efficient and reliable testing of APIs during development

Beaconfire Solution *Oct 2021 – Mar 2022 Windsor, NJ*
Full-stack Engineer
- Designed and developed a robust web-based User Management System utilizing Angular and Spring Boot, streamlining user administration processes
- Incorporated a comprehensive suite of test cases into the project, resulting in an automated code and function verification process
- Implemented login, onboarding, and visa status management features, catering to both employee and HR user groups for an enhanced user experience
- Architected and deployed an efficient database structure on Amazon RDS using MySQL, ensuring seamless data management and scalability
- Leveraged Spring ORM for seamless database connectivity and integrated asynchronous services to optimize system performance and efficiency

PERSONAL PROJECTS

Web-Based Time sheet Management *November 2021*
- Developed a comprehensive React-based web application for efficient management of user weekly timesheets, enabling customizable schedule uploads and personal profile modifications
- Leveraged React-Thunk and Spring Security for seamless Single Sign-On (SSO) implementation, and utilized MongoDB for a robust timesheet database, ensuring swift data retrieval and manipulation
- Architected a microservices-based back-end using Netflix Eureka, incorporating gateway and composite server, and implemented Kubernetes for automated deployment and scaling, enhancing system resilience and adaptability

Cloud Computing using Darknet and AWS *March 2021*
- Developed a Python-based motion-activated video capture system utilizing a Raspberry Pi, enabling efficient and responsive recording upon sensor triggering
- Employed Darknet, a cutting-edge deep learning framework, to locally process captured videos for object detection, classification, and recognition, enhancing data analysis capabilities
- Implemented a priority-based video processing system, uploading the newest video to AWS S3 when four videos were queued on the Raspberry Pi, optimizing resource utilization
- Automated AWS instance generation using Lambda code to process uploaded videos with Darknet, ensuring seamless scalability and prompt video analysis