# **HONGZHI ZHU**

#### **EDUCATION**

**Arizona State University** 

MS in Computer Engineering

Jan 2019 - Dec 2020 Phoenix, AZ

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

- 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
- Configured Gitlab and Jenkins for CI/CD pipeline, resulting in efficient and automated build and deployment processes
- Implemented a Wired transfer automation system, allowing for secure and fast transfer 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

- Developed a web-based application for user management system using Angular and Spring Boot
- Created login, on-boarding, and visa status management functions for both employee and HR users
- Designed the database structure and deployed it on Amazon RDS database using MySQL
- Utilized Spring ORM to build connections and added asynchronization to services to improve efficiency
- Integrated file uploading functionality with AWS S3 to enable the users to upload and manage files efficiently

# **Professional EPICS (Design My Trips)**

Jan 2021 – Oct 2021 Tempe, AZ

Front-end Engineer

- Designed and implemented a custom Chrome extension that allows for the collection of user survey data when they join Facebook groups
- Built a custom user interface for the extension using HTML and CSS, providing an intuitive experience for users
- Integrated the extension with Google Sheets API, allowing for automatic data transfer to a user-specified sheet

## PERSONAL PROJECTS

### **Web-Based Time sheet Management**

November 2021

- Implementation of a single web application with React, allowing employees to manage their weekly time sheets, upload or set default schedules and modify their personal profile
- Use of React-thunk and spring security for SSO
- Use of MongoDB to build the time-sheet database, allowed for quick and easy data retrieval and manipulation.
- Writing micro-service with gateway and composite server for back-end using Netflix Eureka

# **Cloud Computing using Darknet and AWS**

March 2021

- The project used a Raspberry Pi to achieve IoT by using Python as main programming language
- A Python program was used to capture videos when the movement sensor was triggered. The program was set up to record and save videos locally on the Raspberry Pi
- The program used Darknet, a deep learning framework, to process the videos captured locally. The framework allowed for object detection, classification, and recognition in the videos
- -If there were four videos waiting to be processed on the Raspberry Pi, the newest video was uploaded to AWS S3
- Whenever a new video was uploaded to AWS, a new instance was generated automatically by AWS Lambda code to process the video using Darknet