Baihan Chen

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Summary

A Computer Science graduate student with experiences in Agile software development, targeting to deliver high-quality software products. Academic experience with data visualization, frontend and backend development, Amazon Alexa skill implementation, and image processing. Looking for a full-time position in July 2021.

Education

M.S. Computer Science (GPA 3.87/4.0)

05/2021

B.S. Computer Science (GPA 3.4/4.0)

05/2019

Arizona State University, Tempe, AZ

Skills

Statistics and Data Analysis: Python (library: NumPy, Pandas), MATLAB

Software Development: JavaScript (D3), HTML, CSS, Java, Python, Flask web server framework (Python), SQL

Tools: GitHub, Microsoft Access, Lightroom, Davinci, Premiere pro

Projects

ASU, Traffic Detect in Aerial Video

Spring 2021

- Collected and annotated aerial video (20 hours) for traffic detection model training using a DJI drone.
- Implemented the Mask RCNN model for vehicle detection with **PyTorch**, achieved 95% detection accuracy.

ASU, Data Visualization (2015 VAST Challenge -- Dino Fun World)

Fall 2020

- Designed a visualization system to demonstrate the preference of visitors and detect anomaly visitors to prevent potential crime in the Dino Fun World amusement park.
- Utilized Python and processed a million lines of data using the **Pandas** library.
- Implemented data visualizations webpage using the **D3 library** in JavaScript, HTML, and <u>CSS</u>.

ASU, Android Mobile Application Development (Health Check System)

Fall 2020

- Developed and built an Android application that capture users' heart and respiratory rate.
- Collected and processed data in the local device for real-time users' feedback.
- Extracted data from health check application using **SQLite** and built a **Flask web server** to receive and save users' data from the health check application.

ASU, Amazon Alexa Development (Elder Care System)

Fall 2018 - Spring 2019

- Created Alexa skills of the Elder Care System on Amazon echo show device; This feature accurately captures the human voice by 90%.
- Identified potential issues and developed Unit Tests user experience, which improved the test converge of the system by 80%.

ASU, Image Recognition

Fall 2018

• Implemented algorithms to detect and erase the time stamp on photos using OCR algorithm in MATLAB.

Internships

Software Engineer Intern, Med Data Quest, San Diego, CA

07/2019 - 09/2019

- Design and coded an automatic input Python script to verify diagnosis code for each patient in a website.
- Implemented medical related web tools using JavaScript, HTML, CSS and MVC model.
- Research and analysis Speech Recognition and NLP (Natural language processing).

Courses

Front-End and Back-end: Data Visualization, Database Management, Mobile Computing

Software Engineering: Software Project Management, Software Integration and Engineering, Software Testing