Tianrui Li

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Education

Bachelor of Science in Computer Science   *May 2023*
University of Florida, Gainesville, FL   GPA: 4.0/4.0
Minors: Statistics, Electrical Engineering
Relevant Coursework: Data Structures & Algorithms, Fundamentals of Machine Learning, Computer
Graphics, Operating Systems, Data Science, Numerical Analysis, Introduction to Software Engineering

High School Advanced Honors Diploma   *May 2019*
Palo Verde High School, Las Vegas, NV   GPA: 4.0/4.0

Technical Skills

Programming Languages:TypeScript, Python, C++, Java, C#, Julia
Libraries, Frameworks, Tools: Angular, React/React Native, HTML/CSS; Node, Express, Nest, Flask; AWS, Google
Cloud, Firebase, Docker, MongoDB; Jasmine, Cypress, Jest; Pandas, Selenium, PyTorch; OpenGL, Blender (API), Unity
Languages: Mandarin (fluent/conversational)

Work Experience

Studio Reach Software Developer Part-time   *June 2020*
- Implementing user stories for "Are You House Ready" project in Angular and Firebase and writing   *- Now*
  end-to-end and unit tests in Cypress and Jasmine for them
    - Developed new layout for real estate vendor cards/pages, checkup questionnaire for
      guiding new users, among other features
- Engages in daily standups, iteration planning meetings, retrospectives, and pair programming
  sessions as part of an Agile team with a kanban workflow based in Jira

Applications of Discrete Structures Teaching Assistant   *Jan. 2020 -*
- Prepares powerpoint presentations and example problems for brief lecture reviews over core   *Now*
  concepts during weekly discussions for 20-30 students
- Provides 3 hours/week of office hours in order to help address student questions and concerns
- Engages in weekly conferences with the professor and other fellow TAs to plan out the logistics
  of the course, such as times to grade and course content being reviewed

BookMark'd Startup Software Developer Part-time   *Oct. 2019 -*
- Implemented a web app to facilitate buying/selling of college resources between college students   *July 2020*
  through React frontend
- Developed microservices as part of a REST API using Node and Express (e.g. real-time chat,
  product search, and payment processing) and documents in Confluence
- Managed web app infrastructure through AWS services: runs app on EC2 instances, develops a
  pipeline for CI/CD, and sets up domain name and SSL certificate

University of Florida SurfLab Research Assistant   *Oct. 2019 -*
- Implementing radius estimation of vessels of a MRI/CT scan displayed in VR for "VascularVR"   *Now*
  project using Unity
    - Completed in Blender based on nearest neighbor heuristic using Blender API and sklearn

Projects

TA Attendance Grader *Oct. 2020*
- Develops a script that automates the process of taking student attendance for discussions held over Zoom for
  Applications of Discrete Structures course
- Uses Pandas to extract necessary information from CSV files corresponding to a given discussion provided by
  Zoom and interacts with Canvas API through Requests to make necessary grade changes

Language Recognition *Jan. 2021 - Now*
- Developing a neural network model capable of recognizing the language spoken in an audo clip using PyTorch
- Uses Selenium in order to scrape over 250GB worth of audio clips from Mozilla's CommonVoice data set
- Organizes and randomly samples the audio data through Pandas and filters silence through PyDub

Weathr.io *Aug. 2020 - Dec. 2020*
- Implements a web app that aims to connects people to real-time information about weather (i.e. status of a
  natural disaster), especially those without WiFi (potentially due to some natural disaster)
- Uses AWS's Pinpoint and SNS in order to enable users to chat with a bot to obtain such information over SMS
- Facilitates design through React as the frontend and Elastic Beanstalk and DynamoDB for hosting and DBMS