Tianrui Li

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Education

Bachelor of Science in Computer Science *Dec. 2022*
University of Florida, Gainesville, FL GPA: 4.0/4.0
Minors: Statistics, Electrical Engineering
Relevant Coursework: Analysis of Algorithms, Data Structures & Algorithms, Computer Graphics, Computer Networks, Fund of Machine Learning, Operating Systems, Intro to Software Engineering

Technical Skills

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

Work Experience

JPMorgan Chase & Co. Software Engineer Program Intern | Intern Team Dev Lead *June 2021 - Aug. 2021*
- Implement and deploy features for a Spring Boot, Angular web app that enables internal and external users to self service for aggregated data rather than go through operations (OPS) team
  - Shaves minutes OPS team spends for each of the ~1100 failed data points/month
  - Will save OPS team time by eliminating the ~480 calls/month regarding the data
- Lead intern team to ensure project milestones are met and coached members by explaining relevant technologies and concepts (e.g. Git, JUnit testing)
- Develop and document a package individually that abstracts, updates, and consolidates fragmented and nearly deprecated use of the Elasticsearch client

Studio Reach Software Developer Part-time *June 2020 - Mar. 2021*
- Expand a Firebase, Angular web app for connecting clients to real estate vendors in order to improve low site traffic
- Developed a questionnaire for guiding new users, new layouts for vendor cards/pages, etc.
- Write end-to-end and unit tests in Cypress and Jasmine
- Engage in daily standups, pair programming, etc. as part of an agile team with kanban workflow

UF Computer & Information Science & Engineering Teaching Assistant *Jan. 2020 - Now*
- Refactor and extend existing OpenGL code scaffolds for "Computer Graphics" projects to fit new requirements and eases work for students, including additional resources and links
- Prepare presentations and example problems for lecture reviews over core concepts during discussions for 20-30 students for "Application of Discrete Structures"

UF SurfLab Research Assistant *Oct. 2019 - Now*
- Contribute to a Unity VR app for converting MRI/CT scans to simulation-ready ready pieces of anatomy for surgeons to train and learn surgery with using VR
- Develop prototypes on core feature design decisions
  - Implement smart thickness estimation for vessels using Blender API and sklearn
  - Write scripts for examining image data to investigate extent of preprocessing needed

BookMark'd Software Developer Part-time *Oct. 2019 - July 2020*
- Implement a React, Node web app for college student ecommerce; microservices include real-time chat, product search, and payment processing
- Run app on an AWS EC2 instance, add CI/CD pipeline, and set up domain name & SSL certificate

Projects

Attendance Grader Teaching Assistant/Personal Project *Oct. 2020*
- Develop script that automates attendance for 300-400 students in Zoom discussions for "Applications of Discrete Structures", increasing efficiency
- Utilize Pandas and Canvas API to extract info from Zoom CSV files and make grade changes

Language Recognition Personal Project *Jan. 2021 - Now*
- Implement a neural network to recognize languages spoken in audio clips using PyTorch
- Use Selenium to scrape over 250GB of audio clips from Mozilla's CommonVoice data set; organize and randomly sample audio data through Pandas and filter silence through PyDub

Capybara Mental Tracker 2021 SASEhack's Best Hack and Best Use of AI/Cloud *Mar. 2021*
- Implemented a React, Firebase web app that uses AI (CustomVision.AI) to assist learners by recognizing when they are tired and consequently notifying them to take a break