

Jonathan Sum

<https://github.com/JonathanSum/>

Email : XXXXX.com

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EDUCATION

California State University, Los Angeles

Bachelor of Science in Computer Science

Los Angeles, CA

Aug 2020 – Jun 2022

Pasadena City College

Math and Technology AA Transfer Degree

Pasadena, CA

Feb 2018 – Jun 2020

EXPERIENCE

We2Link

Agile Software Engineer(React Native/AI(Deep Learning))

Los Angeles, CA

Aug 2021 - May 2022

- **Mobile App Developer:** 35% speed up the development of IOS and Android app by **Agile method**. I solely implemented many solutions, tested them on Android and IOS, and reported to the team in every 3 days.
- **UI Animation:** Solely solved the **2D recording animation widget** issues; the team couldn't solve it last year.
- **Machine Learning:** Created a caregiver AI by a trained **Pytorch** AI model to perform language comprehension tasks to assist traumatic brain injury(TBI) patients for their memory loss problems.

DeepLearning.AI at Coursera

Software and Course Quality Assurance(link)

Remote, United States

Aug 2020 - Nov 2021

- **Quality Assurance Engineer:** 30 % speeded up the building process on multiple DeepLearning.ai courses on course code, course design, and course lecture with the Agile method. Attended multiple meetings to review and decided our work and role from the manager and the team for **a course with 60000 learners**.

Harvard NLP

Pytorch Engineer (Harvard University website link)

Remote, United States

Aug 2021 - Jun 2022

- **Software Engineer:** Rewrote the NLP **Pytorch** code for compatibility version issues, and improved its resource requirement to allow learners, who do not have GPU, to train the model by themselves.

PROJECTS

Paddy Disease Detector (Computer Vision, Kaggle): Built a **Paddy disease detector with 97.8% accuracy** AI by myself to classify paddy disease; won 2 bronze medals by Kaggle after getting into the top 5.

Facebook's React.js Computer Vision Project (React.js Deep Learning, GitHub): Built a **computer vision** project in **React.js** and **Pytorch**, and reviewed by the Pytorch team before being part of **Facebook's code**.

AI Natural Disaster Detection (Computer Vision, GitHub): Used **Deep Learning** model to label house damage level by natural disasters on the satellite image.

Currency Value Back-End Server (Express.js, GitHub): Implemented a **Rest API** backend server and command line in **Express.js** to display real-time currency information.

CART Software for Deaf Students (React.js Material UI V5, GitHub): Designed and implemented the assistive software, in **React Material UI V5**, for deaf students to understand the class lecture.

Co-purchasing Algorithm (Java Graph Algorithm): Implemented **advanced graph algorithm** in **Java** to use Amazon 2013 co-purchasing **dataset** to suggest an additional product for the customers.

AI Colorization Model (Deep Learning, GitHub): Implemented the **Pytorch model** that can color images from black and white.

SKILLS IN PROGRAMMING LANGUAGES, LIBRARIES, AND FRAMEWORKS

Proficient: Java, Deep Learning, FrontEnd, Web Development, React.js, Redux

Intermediate: Python, C++, JavaScript(ES5/ES6), Computer Vision, Natural Language Processing, Pytorch, Scikit-Learn, ML Ops, React.js, Express.js, Git, React Native, Unity3D, AWS Cloud, Android Development

Coursera Certifications by Stanford University, UCSD, Google, etc (Certifications links):
25 certifications, 6 specializations in Machine Learning, Java, Deep Learning, and more.

My Strength: Writing algorithms, building **React.js** apps for building **websites** or **mobile apps**, and using **Pytorch** for **AI task** .