

Jonathan Sum

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

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

Los Angeles, CA

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

Aug 2021 - May 2022

- **Mobile App Developer:** Speed up the development of IOS and Android app by **Agile method** with implementing 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.
- **Deep Learning(NLP):** Created an **offline caregiver AI** by a trained **Pytorch model** to do a reading and answering through the daily reminders to tell the task for brain Injury patients if they ask on the mobile app.

DeepLearning.AI at Coursera (AWS/NLP)

Remote, United States

Software and Course Quality Assurance(link)

Aug 2020 - Nov 2021

- **Software Course Designer:** Tested on the Software part and the coding course with a one-week deadline with the manager and the team. Answered questions and explained some NLP course concepts for **60000 students**.

Harvard NLP

Remote, United States

Pytorch Engineer (Harvard University website link)

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.

NYU DS-GA 1008 Deep Learning Course by Yann LeCun, etc

Remote, United States

Course Editor/Open Source Contributor (link)

July 2020 - Feb 2022

- **Course Editor:** Fixed issues for the **Pytorch** course code to ensure 100% no issue and modified the reading.

PROJECTS

Paddy Disease Detector (Computer Vision, Kaggle link): 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 link): A **computer vision** website can classify 1000 objects, and the Pytorch team pushed the code to be part of **Facebook's code**.

AI Building Damage Detector using Satellite Image (Computer Vision, GitHub link): Trained a **Deep Learning UNet** model to label house damage level on the satellite image.

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

AI Colorization Model (Deep Learning, GitHub link): One of the top challenging Deep Learning AI problems on coloring the image back again from black and white with 4 hours of training with V100 GPU.

Full Stack authentication role based profile Website in Es6, Express.js, and MUIv5 React.js (GitHub link): Project for Blue-White Industries company, a security JSON Web Token (JWT) login in and a responsive UI.

SKILLS IN PROGRAMMING LANGUAGES, LIBRARIES, AND FRAMEWORKS

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

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, Deep Learning.ai, etc:

42 courses cert. and 7 specializations in Deep Learning, Machine Learning, Object Oriented Java Programming, etc.