Jonathan Sum Email: 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 qsolve it last year.
- Deep Learning(NLP): 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 (AWS/NLP)

Remote, United States

Software and Course Quality Assurance(<u>link</u>)

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 (<u>link</u>)

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 (<u>Deep Learning</u>, <u>GitHub link</u>): 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 vs authorization profile Website in Es6, Express.js, and MUIv5 React.js (<u>GitHub link</u>): 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 Courses Certifications by Stanford University, UCSD, Deep Learning.ai, etc:

Deep Learning, Machine Learning, Object Oriented Java Programming, etc