Jonathan Sum

https://Jonathansum.github.io/

Education

California State University, Los Angeles — Los Angeles, CA
Bachelor of Science in Computer Science — *Aug 2020 – Jun 2022*

Pasadena City College — Pasadena, CA
Math and Technology AA Transfer Degree — *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 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(link) — *Aug 2020 - Nov 2021*

- **Software Course Designer**: Sped 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 — 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): 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): 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): 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, Deep Learning.ai, etc:
Deep Learning, Machine Learning, Object Oriented Java Programming, etc