

Duolan Ouyang

Email: duouyang@ucsd.edu | TEL: (858) 997-7497 | GitHub: [duouyang](#) | Address: San Diego, CA | [linkedin.com/in/duolan-ouyang-509012179](https://www.linkedin.com/in/duolan-ouyang-509012179)

EDUCATION

University of California San Diego (UC San Diego)

Sep. 2018 - Mar. 2022 (expected)

- B.S. in Computer Science (GPA: 3.93/4.0)

SKILLS & TECHNOLOGIES

Languages

Java, Python, JavaScript, C/C++, Swift, Haskell, R

Technologies

Linux, Git, Firebase, React, Node.JS, JUnit, GDB, PyTorch, Adobe XD

AI Related Topics

Traditional Machine Learning, CNN, RNN, Searching and Reasoning, Reinforcement Learning

PROFESSIONAL EXPERIENCES

Machine Learning Engineer Intern at Add-Care Limited, Shenzhen China

June. 2020 - Present

- Machine Learning Engineer on Motion Detection team and AWS team for Glucose Test Watch.
- Use Deep Learning to recover noisy photoplethysmogram (PPG) waveform and classify sleeping conditions.
- Use Python to test user input error in AWS Lambda and make correction.

Academic Tutor at Computer Science Department, UC San Diego

Sep. 2019 - Present

- Experience with tutoring multiple Java and Python courses with hundreds of students enrolled.
- Hold more than 100 hours of Lab Hour to help students with programming assignments.
- Design and implement test cases by Python and JUnit for more than 15 programming assignments.

User Interface Engineer at iSoftStone Inc., Nanjing China

Jul. 2019 - Sep. 2019

- Utilized Bootstrap, JavaScript and LayUI Library to build frontend pages for a Microservice project.
- Collaborated with backend team to implement client side analysis interface.

PROJECTS

IntelliKitchen IOS Application

Mar. 2020 - June. 2020

- Used Adobe XD to design the interface and workflow for the application.
- Utilized Python to web scrape more than thousand of recipes and arrange them in Firebase realtime database.
- Designed the Firebase cloud database scheme to efficiently store and search user information.
- Implemented the notification system using Swift and refactored code to fit MVC pattern.

Recipe 101 Web Application

Sep. 2019

- Utilized Python to web scrape recipes and ingredients and arrange them in MySQL database.
- Implemented receipt recognition and parsing system by using AWS Recognition API.
- Used JavaScript and Node.js package to implement searching algorithm based on the food expiration date and make realtime display.

Forbes Top 100 Celebrity Face Classification Machine Learning

Oct. 2019

- Utilized PyTorch to implement multiple Convolutional Neural Network (CNN) models including baseline model, several improved models, and transfer learning model based on AlexNet.
- Incorporated Weighted Sampling, Xavier Initialization, K-fold Validation, Batch Normalization and other state-of-art techniques so that the best model can achieve an accuracy of over 90%.

More Projects

Dec. 2018 - Present

- 2048 AI Algorithm: wrote heuristic decision tree, reached 4096 with > 95% consistency in Python.
- Smart Flashcards Generator: used Machine Learning algorithm to detect academic terminologies, used web scrape to auto-define the word, and used JavaScript to generate Flashcards.
- Lyrics Popularity Analysis: used Python to scrape 3 years of Spotify Top 100 songs and their lyrics; using Linear Regression to decide the factor that influence a song's popularity based on gender, artist popularity, sentiment analysis index and so on.