

# Jia Yong Li

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## EDUCATION

UNIVERSITY OF MARYLAND, COLLEGE PARK | BS COMPUTER SCIENCE

May 2022

GPA: 3.3

| RELEVANT COURSES: ALGORITHMS, ORGANIZATION OF PROGRAMMING LANGUAGES, LINEAR ALGEBRA, OPERATING SYSTEMS

## WORK EXPERIENCE

NASA GODDARD | SOFTWARE ENGINEER

Greenbelt, MD | Jan 2020 – Aug 2020

- Pushed for the development of new atmospheric correction software for satellite imagery, improves efficiency and accuracy by 50% and contributed to ARCSI open source project
- Deployed atmospheric correction software on AWS EC2 along with automatic data conversion and reduces noise of data by 30%
- Developed machine learning model using Keras to predict the presence of minerals and compounds based on pixel signature with 90% accuracy

MACH33 ENGINEERING | SOFTWARE ENGINEER

Laurel, MD | May 2019 – Nov 2019

- Used HTML, CSS, and PHP to develop site which allowed for real time data viewing of aerosol sensor data and also provided tools for scientist to view metadata data
- Supported the development of Laser Heterodyne Radiometer instrument by creating python OPENCV2 based verification tool to determine the validity of sensor position

## SKILLS

BASIC

AWS EC2, Docker, Javascript, HTML, PHP, Matlab, Swift, Machine Learning/Data Science

PROFICIENT

Python, Java, Git, Github, Linux, OCaml, Ruby, AGILE, Arduino, OpenCV

## SELECTED PROJECT

PENNAPPS 2019 | JAVA

Sep 2019

Led team of 4 by delegating tasks and timeline to develop a budgeting app using Capital One's Nessie API for the android system. Tool automatically categorizes transactions and allowed users to implement budgets.

WEB-BASED YOLOV3 | JAVASCRIPT, HTML, PYTHON, TENSORFLOW.JS

June 2020

Converted existing machine learning model YOLOv3 based on darknet into Keras model/TensorFlow JavaScript and developed site to detect objects through webcam in real time

HOOHACKS 2019 | SWIFT

Mar 2019

Designed and implemented IOS app which allowed users to save their courses and grades and add hypothetical grades. Calculates grade required to achieve/sustain user defined GPA

ECO-VENT | ARDUINO

Mar 2020

Supported the development of ECO-Ventilator by writing and refining arduino code for data viewing

## HONORS/ACTIVITIES

UMCP SCHOLARS AUG 2018-PRESENT | SGC SCHOLARS

Recognized for participating in activities that promoted environmental awareness and organized events to raise funds for non-profit environmental organizations

TAIWANESE AMERICAN STUDENT ASSOCIATION AUG 2019-PRESENT | TASA